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ABSTRACT

From 1970 to 1980, Indiana's population grew 5.7 percent, with the white population growing less than 4 percent as opposed to a 30 percent growth rate for minority groups. Nearly 64.4 of the state's minority population resided in Marion and Lake counties as of 1980. Except for Asian Americans, Indiana residents who belong to ethnic minority groups tend to be much less well educated than their white counterparts. This is especially true of Hispanic persons. Minority group members have higher dropout and unemployment rates, and there are more illegitimate births and households headed by women among minority groups. These trends suggest that policymakers in Indiana will need to make a major commitment to see that all citizens, regardless of age or ethnic/racial background, have the opportunity to develop and perform at the highest levels possible. (This report includes 31 tables; a reprint of an article entitled "Equality and Excellence: The Educational Status of Black Americans"; and selected excerpts from the following reports: "Hispanics in the Labor Market: 1980-1985," "Access to Higher Education: The Experience of Blacks, Hispanics, and Low Socioeconomic Status Whites," and "The Reading Report Card: Progress toward Excellence in Our Schools--Trends in Reading over Four National Assessments, 1971-1984.") (MN)

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IMPLICATIONS OF CHANGING ETHNIC-GROUP REPRESENTATION IN INDIANA'S POPULATION

PART 1: HIGHLIGHTS AND SUMMARY (1 OF 3 PARTS)

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31 MARCH, 1986

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CE 045 439

IMPLICATIONS OF CHANGING ETHNIC-GROUP REPRESENTATION IN INDIANA'S POPULATION
(Errata & Note)

Pg. iv, Table of Contents

"TABLE 8. Births by..." should be "TABLE 6. Births by..."
"TABLE 9. Births by..." should be "TABLE 7. Births by..."

Pg. 8: Add Note to TABLE 6:

Race is self-reported by parent(s) on birth certificate. Non-White includes Blacks, Native Americans, Asians and Pacific Islanders, and other Non-Whites, except Hispanics. Spanish-origin is not identified, but (according to the U.S. Census) half of Indiana Spanish-origin persons identify themselves as White. Thus, typically low birth-rate "White" includes some (high birth-rate) Minorities, while "Non-White" includes low birth-rate Oriental Americans. Thus, in this Table the numbers of White births are over-stated, and Minorities are under-stated, because Hispanics are treated as Minority group members throughout this report.

Pg. 16, TABLE 10:

The number of Black dropouts for 1978-79 should be "3,932, not "3,392".

Pg. 31, TABLE 16:

The White Verbal SAT Scores should read "449" in the U.S. and "425" in IN. not "445" and "420". The Hispanic scores should be "377" for the U.S. and "383" for IN not "368" and "378". The Black SAT Verbal Scores should be "346" for the U.S. and "336" for IN. not "342" and "331".

Pg. 52, TABLE 28:

The percent of Unemployed White teenagers should be "16.2%" not "6.9%".

* Manpower Report 86-2
Dated 31 March '86

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IMPLICATIONS OF CHANGING ETHNIC-GROUP REPRESENTATION IN INDIANA'S POPULATION
PART 1: HIGHLIGHTS
(1 OF 3 PARTS)

FOREWORD

This manpower study presents data on population, education, academic preparation, socio-economic factors and employment for various ethnic groups in three separate reports (parts). Trends are identified and comparisions are made between Indiana, Regional and National situations. Data are presented separately for selected Indiana counties due to startling differences in the concentration of ethnic groups. Projections show growing proportions and diversities of minorities with significant differences in characteristics between groups.

PART I contains broad findings, highlights, summary data and related information, including comparisons among the U.S, Indiana, and four Indiana counties with the largest minority populations. These are

Marion County,	Allen County, and
Lake County,	St. Joseph County.

PART II contains more discussion and supportive data in tabular and figure form, including comparisons between the U.S., Midwest Region, Indiana, and the 22 Indiana counties having at least 1,000 minorities in their populations in 1980. These counties are

Marion County	LaPorte County	Howard County	Miami County
Lake County	Delaware County	Clark County	Bartholomew County
Allen County	Vigo County	Tippecanoe County	Johnson County
St. Joseph County	Elkhart County	Wayne County	Hamilton County
Vanderburgh County	Grant County	Floyd County	
Madison County	Monroe County	Porter County	

PART III is made up of extensive and detailed appendices containing U.S., Midwest, Indiana, and selected-county data applicable for historical reference, planning, or further research. Specific demographic and socio-economic data and information in these reports show that significant changes in America and Indiana are occurring in more detail.

Those who might think that the size of Indiana's minority population, now 10 percent of the total, is relatively "small," should note that:

- Indiana's minority population is already well over a half-million persons,
- One out of every four babies being born in the four counties with the largest populations is Non-White,
- One out of every six babies being born in the twenty-two counties which have more than 1,000 minorities in their populations is Non-White, and
- These Non-White representation rates are growing steadily

It will be up to civic leaders, educators, policy makers and others to respond to these emerging realities that will pose problems, challenges and opportunities. The authors hope that these publications will assist in actions which will promote equality, strengthen the economy, and provide all citizens with opportunities for a successful life.

QUOTES OF NOTE

Bill Liu, an American-Chinese living in Chicago said "The so-called melting pot is a fantasy. Some people never melt. We have to realize the American society is a society of pluralism. We're not inferior, we're just different."

Beatrice Liu, Bill's daughter -- now a college student -- said she realized she wasn't quite the same as other children growing up in South Bend, Indiana. "I was in the first grade and this little boy said "Can't you open your eyes a little wider?"

We hope this report will help us to do just that.

J. P. Lisack

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The College Board (both National and Midwestern Offices)
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The Indiana State Board of Health
The Indiana Commission for Higher Education
The U.S. Department of Labor
The U.S. Bureau of the Census

Special Thanks

To Dr. Solomon Arbeiter of The College Board and to Dr. Harold Hodgkinson, senior fellow at the American Council on Education, who said, among other things, "It literally costs you about seven times as much to have somebody at the state pen as it does to have somebody at Penn State." for their leadership in this time of transition and their foresight in contributing to planning for the future.

Also to Ms. Natala K. Wickstrom, Director, Purdue Financial Aids Office.

and to

Lilly Endowment, Inc. for the partial funding for Part I of this study.

Finally, many thanks to Ms. Beverly K. Sloniger and Keith A. Horner for their proficiency on the word processor and construction of tables.

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INTRODUCTION

The population changes already well underway in America and Indiana will have profound effects on the total educational system, Kindergarten thru the University level, as well as on the economy. Dr. Harold Hodgkinson has made the following points about the profile of today's and tomorow's students:*

There are now more children coming to school from poverty-level households, from single-parent households (White, Black and Hispanic), more with unmarried parents, more with teen-age mothers, and fewer children entering the first grade having participated in Head Start or similar programs, even when eligible. There are more minority children entering school now, and consequently more children with limited English speaking, reading, and writing ability in the classroom.

There are now many more "latch-key" children, and children from blended families resulting from divorce and remarriage. The population of White middle-class children is increasing throughout the educational system. America's Black population is projected to rise from 26.5 million today to 44 million by the year 2020. Hispanics will increase from 14.7 million today to around 47 million by 2020, due to higher birth rates and immigration.

As our nation's population grows from 238 million to about 260 million people by 2020, almost all of the increase will be in Non-White groups, as the White birth rate is not high enough to maintain the current population level. (It takes 2.1 children to achieve a balance between births and deaths, and the White birth rate is only 1.7.)

While long range figures are difficult to forecast, it is clear that during the 1980s the number of Asian Americans in the United States will increase from 3.5 million to almost 6 million. How this increase will affect our education system is unknown.

Although the number (and percentage) of minorities graduating from high school showed some heartening increases during the 1970s, it now appears that the percentage of minority high school graduates who go on to college is decreasing, at least for Black and Hispanic groups.

At the moment, many leaders in higher education levels seem to exhibit a general attitude of indifference to these important population trends.

It might be well to remember that high school graduates of the year 2000 are already three years old. Will they be ready to enter a work force which requires a sound educational foundation to meet changing job needs; will they be ready to participate successfully in higher education?

---

* *Harold L. Hodgkinson, All One System: Demographics of Education, Kindergarten through Graduate School. Washington, D.C.: Institute for Educational Leadership, Inc., 1985.*

1. POPULATION

A. Census

Since the First World War, the composition of the United States and Indiana populations has been increasingly changing, most markedly since 1960. More than just racial differences, this composition reflects an ethnic or cultural diversity and has been attracting greater attention and study.

Although Blacks have constituted the largest minority group in the nation and in Indiana and have higher birth rates than Whites, the greatest impact will continue to be from the high levels of birthing and/or immigration of Hispanics and Asians, which has been termed "the Fourth Wave" by the Urban Institute.[1/] Hispanics are already having an increasingly significant economic and political impact on the nation.

The U.S. Spanish population has been growing much faster than the total population and, as of March 1985, account for one of every 14 persons.[2/] At the Spanish population's rate of increase, it could become the largest national ethnic-minority group by the year 2000.[3/]

This sharp increase in the Spanish population, is being rivaled by a faster rate of increase in the Asian population, which increased 141 percent between 1970 and 1980 to total 5.1 million.[4/] At this rate, they will reach 10 million by the year 2000, but they would still be the third largest ethnic-minority group (behind Blacks and Hispanics).

This changing ethnic diversity of U.S. and Indiana populations is especially prevalent among young people and the retirement-age population. In these cases a higher proporiton of young people and a lower proportion of retirement-age persons are from ethnic-minority groups.[1,2,4/] Of course, this has resulted in a higher proportion of minority women being in the fertility-age range.

NOTE: The U.S. Bureau of the Census designates persons who identify themselves as being of Spanish Origin but who may identify their race as White, Black, or other races (excludes "Spanish"). In contrast, the ethnic group "Hispanic", as designated in census data tables in this report to preserve data consistency, refers to persons of Spanish origin who do not identify their race as being White, Black, Native American, or Asian/Pacific Islander. These Hispanics represent 38 percent of the U.S. Spanish Origin group and 49 percent of Indiana's Spanish Origin group and tend to differ more extensively from Whites than do persons of Spanish Origin in general.

1/ John S. Lang & Jeanny Thornton, "The Disappearing Border." U.S. News & World Report, Aub. 19, 1985, pp. 30-31.

2/ AP release, "Hispanic Population Growing Fast." USA Today, Thursday, Jan. 30, 1986, p. 3A.

3/ Harold L. Hodgkinson, "Demographics and the Economy: Understanding a Changing Marketplace." The Admissions Strategist, Jan. 1985.

4/ Paul Clancy, "141% Growth for Asians in the USA." USA Today, Thursday, Oct. 10, 1985; "3 Major Roadblocks," USA Today, Friday, Feb. 7, 1986, pp. 1A, 2A.

Another important demographic change is occurring with regard to the distribution of population by age. For example, projecting Indiana's population from 1980 to the year 2000, the number of younger people (ages 0 to 14) will probably decline by 6%, the 15 to 19 year group will drop some 17%, and the number of 20 to 24 year group will drop more than 15%. Meanwhile the 25 to 64 age group may grow some 18%, and those over 65 will also increase significantly. (The post-WWII baby boomers are now beginning to move into their early 40's.)

TABLE 1

POPULATION PROJECTION SUMMARY

STATE OF INDIANA

AGE STRUCTURE: 1980-2000

AGE GROUPS	1980	2000	NUMBER CHANGE	PERCENT CHANGE
0-4	418,770	392,750	-26,020	- 6.2%
5-14	887,880	830,940	-56,940	- 6.4%
15-19	529,630	440,050	-89,580	-16.9%
20-24	518,660	439,020	-79,640	-15.4%
25-64	2,549,930	3,005,030	455,100	17.8%
65+	585,400	747,710	162,310	27.7%
TOTAL	5,490,200	5,855,500	365,300	6.7%

* *Reasons for changes: (1) Declining birth, (2) Post World War II baby boom, and (3) Net out-migration.*

SOURCE: Indiana University, Division of Research, School of Business--and the Indiana State Board of Health. Indiana County Population projections, 1985-2020. Published in 1983.

Of great significance to educational planners -- and the future workforce -- is the fact that the above projections show a continuing decline of younger people (age 24 and below) and an increase of older people. This phenomenon is reflected in the steady rise of the median age of the population.

MEDIAN AGE	
1980	28.7
1985	30.4
1990	31.9
1995	33.3
2000	34.7

The population of the United States grew about 11.6% between 1970 and 1980; Indiana grew only about 5.7% during that period. The rapid growth of minorities is readily apparent when one realizes that from 1970 to 1980

- in the United States, the White population grew 6.1% while the Minority population grew 50.2%, and
- in Indiana, the White population grew only 3.8% while the Minority population grew 30.3%. (And in fact, the White population actually decreased between 1980 and 1985, while all minority populations continued to grow.)

The latest population data to 1985 show that Indiana continued to lose ground: while the Nation grew 5.4% between 1980-85, Indiana grew only 0.2% (barely maintaining it's status quo).

In 1980, the total U.S. population numbered almost 227 million, of which over 26 million (12%) were Black, almost 6 million were Hispanic, and almost 4 million, Asian and Pacific Islander. The proportion of minorities is growing faster than that of Whites throughout the Nation as it is in Indiana.

TABLE 2

INDIANA POPULATION DISTRIBUTION BY RACE: 1950-1985
(THOUSANDS)

Year	Total Population (100%)	White		Minorities					
				All Minorities		Blacks		All Others**	
		Number	% Total	Number	% Total	Number	% Total	Number	% Total
1985	5,499	4,977	90.5%	522	9.5%	426	7.7%	97	1.8%
1980	5,490	5,004	91.2%	486	8.8%	415	7.5%	71	1.3%
1970	5,194	4,820	92.8%	373	7.2%	358	6.9%	15	.3%
1960	4,663	4,389	94.1%	274	5.9%	269	5.8%	5	.1%
1950	3,934	3,759	95.5%	176	4.5%	174	4.4%	2	.1%

**Includes mostly Hispanics, as well as Asians and American Indians.

SOURCE: 1980 Census of Population, (PC80-1-B16), Table 17, p. 26. Bureau of the Census, U.S. Dept. of Commerce, August 1982; 1985 ethnic group data compiled by Office of Manpower Studies.

The gradual growth in Indiana of minorities in numbers and proportion is apparent in Table 2. Note that minorities made up 4.5% of the population in 1950 and 9.5% in 1985. All indications point to an acceleration of this change.

The largest minority group in the Nation, as well as in Indiana, is Black. The numbers of Blacks continue to get larger while those of Whites continue to decline. Nearly 8% of the Indiana population was Black in 1980 (slightly less than 415,000), but the rate of growth was slightly higher than the National rate.

The nation's (and Indiana's) Spanish population continues to grow much faster than the population as a whole. New Census Bureau figures show that as of March 1985 there were nearly 17 million people of Spanish origin, a growth of nearly 16% since the 1980 census, while total population increased only about 3.3%. Overall, Mexican-Americans make up the largest share of Spanish people.

Although accurate 1985 Spanish population data for Indiana were not available by press time, the Hoosier Hispanic population was reported to be about 42,652 in 1980. Nearly half (20,745) lived in Lake County.

TABLE 3

INDIANA POPULATION CHANGES BY RACE: 1950 TO 1985

	Total		White		MINORITIES					
					All Minorities		Black		All Others**	
	Number 1,000's	%* Change	Number 1,000's	%* Change	Number 1,000's	%* Change	Number 1,000's	%* Change	Number 1,000's	%* Change
1985e	5,499	.2%	4,977	-.5%	522	7.4%	426	2.7%	97	36.6%
1980	5,490	5.7%	5,004	3.8%	486	30.3%	415	15.9%	71	347.4%
1970	5,194	11.4%	4,820	9.8%	373	36.1%	358	33.1%	15	200.0%
1960	4,663	18.5%	4,389	17.0%	274	55.7%	269	54.6%	5	150.0%
1950	3,934	--	3,759	--	176	--	174	--	2	--
% Change 1950-1985		39.8%		32.4%		196.6%		144.8%		4750.0%

* *% change from previous earlier date.*
** *Including mostly Hispanics, American Indian and Asians.*
SOURCE: 1980 Census of Population, (PC80-1-B16), Table 17, p. 26. Bureau of the Census, U.S. Dept. of Commerce, August 1982. 1985 data estimated by Office of Manpower Studies.

In Indiana while the total population between 1950 and 1985 grew nearly 40%, the White population grew only 32.4% (in fact the White population actually decreased in number from 1980 to 1985). However, during this same period, the total number of minorities in Indiana grew from about 176,000 in 1950 to about 522,000 in 1985, an increase of nearly 200%! The largest growth, however, has been Hispanics, who may now number nearly 80,000 in Indiana. The Nation is also experiencing a higher growth rate of Hispanics over Blacks.

From 1970 to 1980, Indiana's population grew 5.7 percent from 5,193,700 to 5,490,200 persons. The White population grew less than four percent (from 4,820,300 to 5,004,400) while all minorities grew more than 30 percent (from 373,300 to 485,800). The highest growth-rate was of non-Black minorities, with almost a 350 percent increase (from 15,900 to 71,000) compared to 16 percent growth for Blacks.

Asians, however, have the highest rate of growth in the U.S., and they outperform all other population groups in the classroom and workplace. Asians now make up only about 3% of the population, but if their growth rate continues -- 141 percent from 1970 to 1980 -- they'll reach 10 million by the year 2000. They are already the third largest minority, after Blacks and Hispanics. Asians tend to be young, well-educated, and of middle-to-upper income. Major Asian groups, except Vietnamese, have a higher proportion of men who finished high school than Whites and are about twice as likely to have college degrees (35% vs. 19.5%). There were about 23,400 Asians in Indiana in 1980 and they are experiencing a high rate of growth. Largest concentrations included 4,260 living in Marion County, 2,100 living in Lake County, 1,700 in Tippecanoe, 1,285 in Allen, 1,178 in St. Joseph, and 1,140 in Monroe.

TABLE 4

1980 POPULATION BY ETHNIC GROUP FOR UNITED STATES, INDIANA AND SELECTED COUNTIES
(NUMBERS IN THOUSANDS)

Geographical Area	Total Number (100%)	White		Minority									
				Total[1]		Black		Hispanic[2]		Native Amer.		Asian/Pac Isl.	
		Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
United States	226,730	189,035	83.4%	37,694.6	16.6%	26,482.3	11.7%	5,503.7	2.4%	1,543.3	.7%	3,910.3	1.7%
Indiana	5,490	5,004	91.2	485.8	8.9	414.8	7.6	42.7	.8	7.8	.1	23.4	.4
Marion Co.	765	601	78.6	164.1	21.5	155.3	20.3	3.5	.5	1.1	.1	4.3	.6
Lake	523	373	71.4	149.5	28.6	126.1	24.1	20.7	4.0	.7	.1	2.1	.4
Allen	294	263	89.3	31.4	10.7	26.4	9.0	3.2	1.1	.5	.2	1.3	.4
St. Joseph	242	216	89.4	25.5	10.6	21.6	8.9	2.3	.9	.5	.2	1.2	.5
Total Four Counties	1,824	1,454	79.7%	370.7	20.3%	329.4	18.1%	29.7	1.6%	2.8	.2%	8.8	.5%

[1] *Estimated as all non-Whites.*
[2] *Estimated as Total-Whites-Blacks-Native Americans-Asian/Pac. Islanders-non-Spanish "Not Elsewhere Classified", i.e., Spanish people who do not identify themselves as any of the aforementioned races.*

SOURCE: 1980 U.S. Census Reports.

Indiana's minority population is concentrated in a few counties. Nearly 314,000 of the 486,000 minorities in Indiana (64.6%) lived in Marion and Lake Counties in 1980. Marion County had the largest county minority population (164,000), almost all of which (more than 20% of the county) was Black. However, Lake County contains a larger percent concentration of minorities (28.6%), of which 126,000 were Blacks and nearly 21,000 were Hispanic (this is the highest number of Hispanics in any county). More than 10% of the populations of Allen and St. Joseph Counties are made up of minorities. It is significant that the proportion and numbers of Whites are decreasing, while the proportion and numbers of Minorities are growing throughout the State as a whole.

NOTE: Each of twenty-two Indiana counties had more than 1,000 minority members in 1980. See Part 2 of this series of reports for details of each of these twenty-two counties.

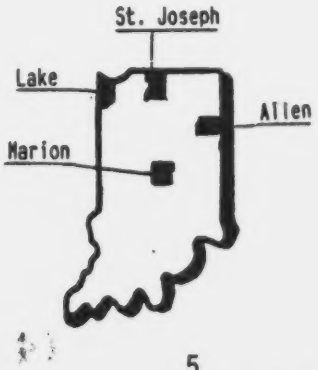


TABLE 5

POPULATION CHANGE COMPARISONS BY ETHNIC GROUPS FOR UNITED STATES, INDIANA AND SELECTED COUNTIES: 1970 TO 1980
(NUMBERS IN THOUSANDS)

Geographical Area	TOTAL		WHITE		MINORITY					
					Total 1/		Black		Other	
	Number 1980	Percent Change*	Number 1980	Percent Change*	Number 1980	Percent Change*	Number 1980	Percent Change*	Number 1980	Percent Change*
United States	226,730	11.6%	189,035	6.1%	37,694.6	50.2%	26,482.3	17.5%	11,212.3	339.4%
Indiana(Total)	5,490	5.7	5,004	3.8	485.8	30.1	414.8	16.0	71.0	347.4
Marion County	765	-3.4	601	-8.3	164.1	19.8	155.3	15.5	8.8	249.1
Lake County	523	-4.3	373	-13.5	149.5	30.7	126.1	12.5	23.5	896.9
Allen County	294	5.0	262	1.1	31.4	54.3	26.4	36.8	5.0	370.6
St. Joseph County	241	-1.4	216	-4.1	25.5	29.9	21.6	16.2	3.9	266.5
Selected Counties	1,824	-2.1%	1,453	-7.6%	370.7	27.2%	329.4	15.8%	41.3	487.3%

* *Percent change between 1970 and 1980.*

1/ *Estimated as all Non-Whites.*

SOURCE: 1970 and 1980 Census Reports.

The disparity between White and Minority population change is accentuated in the four highest-population counties in Indiana. The total populations of these four counties (Marion, Lake, Allen and St. Joseph) between 1970 and 1980 decreased 39,900 (-2.1%). However, while the White population decreased 119,100 (-7.6%), the Minority population increased 79,200 (27.2%). The greatest percentage increase of minorities was for non-Blacks (mostly Hispanic).

B. Birthing Patterns

The increasing minority representation within the U.S. and Indiana populations is attributable to high immigration (of Spanish and Asian persons) and also to substantially higher fertility rates of Spanish and Black women than for White women.[1,2] Asian women have the lowest rates. These high minority fertility rates are in contrast to the net out-migration of Indiana's total population[2] and declining White population, thusly accelerating the relative growth of minorities.

1/ AP release, "Hispanic Population Growing Fast." USA Today, Thursday, Jan. 30, 1986.

2/ U.S. Bureau of the Census, Provisional Projections of the Population of States, by Age and Sex: 1980 to 2000 (Current Population Reports, Series P-25, No. 937). U.S. Government Printing Office, Washington, D.C., 1983, pp. 39, 41.

The actual births in Indiana from 1970 to 1984, by race, are shown in Table 6, where it is evident that the proportion of minorities' births have steadily exceeded that of Whites.

TABLE 6

BIRTHS BY RACE FOR INDIANA: 1970-1984

	Number of Births			Crude Birth Rates[1]		Percent of all Births			Fertility Rates[2]	
	Total	White	Non-White	White	Non-White	Total	White	Non-White	White	Non-White
1970	99,379	90,114	9,265	1.87%	2.48%	100.0%	90.68%	9.32%	8.95%	11.22%
1972	87,140	78,021	9,119	1.59	2.29	100.0	89.54	10.46	7.50	10.12
1974	83,240	74,185	9,055	1.51	2.16	100.0	89.12	10.88	6.88	9.20
1976	80,648	71,802	8,846	1.47	2.04	100.0	89.03	10.97	6.47	8.31
1978	83,348	74,007	9,341	1.51	2.04	100.0	88.79	11.21	6.57	8.24
1980	88,420	78,517	9,903	1.57	2.04	100.0	88.80	11.20	6.78	8.12
1982	83,890	74,560	9,330	1.50	1.86	100.0	88.88	11.12	6.38	7.26
1984	79,883	70,931	8,952	NA	NA	100.0	88.79	11.21	NA	NA

1/ Births as percent of population.
2/ Births as percent of female population in fertile age period (15 to 45 yrs. of age).

SOURCES: Indiana Births 1979-1981. Indiana State Board of Health, 1984. Augmented by 1983 & 1984 data from Indiana State Board of Health, October 1985.

The total number of births in Indiana decreased from 99,379 in 1970 to 80,648 in 1976, increased to 88,420 in 1980 and then declined again to 79,883 in 1984. The largest part of the 1970 to 1984 decrease was in the number of White babies, which fell from 90,114 in 1970 to only 70,931 in 1984 (a 21.3% decrease). However, the number of Non-White babies born remained relatively stable, starting with 9,265 in 1970 (9.3% of total births) and ending with 8,952 in 1984 (11.2% of total births). This uneven change is due to higher fertility rates for minorities during this period of time, which is expected to continue. The growing numbers of births to Hispanic mothers is not available, as the Indiana Board of Health data shows only White and Non-White births. However, the fertility rate (as well as the growth rate) of Hispanics is known to be the highest of all ethnic groups.

The fertility rates (births as a percent of fertile female population) declined markedly from 1970 to 1982 for both Whites and Non-Whites. As a result, the fertility rate ratio (Non-White to White) has also declined. It should be noted, however, that the fertility rate of Non-Whites is <u>still</u> <u>higher</u> than that of Whites.

The gradual increase in the size of the Minority population in Indiana is based in large part on the higher birth rates of Non-White women and the fact that a higher percentage of them are in the fertility age range. As shown earlier in Table 2, all minorities amounted to about 8.9% of the total population in 1980 and grew to nearly 9.5% in 1985. However, between 1982 and 1984, fewer than 89 percent of all births were White while 11.2 percent were Non-White.

Those who might think that the size of Indiana's minority population, now slightly less than 10 percent, is relatively "small", should note that

- The minority population is already well over a half-million persons,
- One out of every four babies being born in the four counties with the largest populations is Non-White,
- One out of every six babies being born in the twenty-two counties which have more than 1,000 Minorities in their populations is Non-White, and
- These Non-White representation rates are growing.

From 1979 to 1984, almost 80 percent of Non-White births occurred in the 4 selected counties shown in Table 7. The fertility rates (births as a percent of the female population in the fertile ages 15 through 44) were also higher for these 4 counties.

TABLE 7

BIRTHS* BY RACE FOR INDIANA AND SELECTED COUNTIES FOR THREE-YEAR PERIOD, 1982-1984

Geographic Area	Number of Births			Percent of all Births		
	Total	White	Non-White	Total	White	Non-White
Indiana	244,550	217,175	27,375	100.0%	88.8%	11.2%
Selected Counties						
Marion County	39,823	29,503	10,320	100.0%	74.1%	25.9%
Lake	24,521	16,666	7,855	100.0	68.0	32.0
Allen	14,061	12,070	1,991	100.0	85.8	14.2
St. Joseph	10,535	8,865	1,670	100.0	84.2	15.9
4 County Total	88,940	67,104	21,836	100.0%	75.4%	24.6%
% of Racial Group	36.4%	30.9%	79.8%	---	---	---

SOURCE: Indiana State Board of Health, October 1985.

In Indiana in 1980 the number of children for every thousand women of standard child-bearing age was higher for Minorities than for Whites. For every thousand women (by ethnic group) 15 through 24 years old, the number of children for Minorities (570) was almost twice the White number (332). The number of children for Minorities was also much higher than for Whites for both the 25 through 34 age-group (1,911 vs. 1607) and the 35 through 44 age-group (3,196 vs. 2,725). One exception is that the number of Oriental American children was much lower than even for Whites.

2. EDUCATION TRENDS

A. Adult Educational Levels

With the rapidly increasing ethnic-minority populations, one concern is the relatively low educational attainment levels of adults. Except for Asian Americans (who tend to be well-educated)[1], ethnic-minority adults are much less-well educated than White adults; this is especially true for Spanish persons.[2,3] Educational level patterns of minorities in Indiana parallel those of the U.S. in general. (See Table 8 on the next page.)

According to the 1980 Census, of the 133 million adults 25 years of age or older in the United States, almost one-third had obtained at least one year of post-high school education, with one out of six obtaining four or more years. However, much higher percentage of Whites (33%) and Oriental Americans (50%) obtained at least one year of higher education than did Hispanics (16%), Blacks (22%), or Native Americans (24%).

Of the 3 million adults in Indiana, only one-fourth had one or more years of higher education, which is well below the U.S. (or Mid-West) averages. Oriental Americans and Whites again had higher percentages achieving at least one year of higher education than did Hispanics, Blacks, or Native Americans. In contrast, a higher percentage of Hispanic adults, as well as Native American and Black adults, had less than a high school education than did Oriental American or White adults.

The educational levels of Indiana adults also varied across counties. For example, when examining the four highest populated counties in Indiana, while the percentage of total population with one or more years of higher education was 32 percent for Allen County and 31 percent for Marion County, it was only 22 percent for Lake County and 28 percent for St. Joseph County. Similarly, the percentage of Hispanics with such education was highest for Marion and Allen Counties and lower for Lake and St. Joseph Counties. (Lake County contains the largest percentage of all Indiana Hispanic adults.) Conversely, the percentage of Blacks with one or more years of higher education was highest for St. Joseph and Lake Counties but slightly lower for Allen and Marion Counties.

1/ *Paul Clancy, "141% Growth for Asians in the USA."* USA Today, *Thursday, Oct. 10, 1985.*

2/ *John S. Lang & Jeannye Thornton, "The Disappearing Border."* U.S. News & World Report, *Aug. 19, 1985, pp. 30-31.*

3/ *AP release, "Hispanic Population Growing Fast."* USA Today, *Thursday, Jan. 30, 1986, p. 3A.*

TABLE 8

HIGHEST EDUCATIONAL LEVEL ATTAINED BY ADULTS (≥ 25 YRS.) BY ETHNIC GROUP: 1980

United States

	Elem.	High School		College		
	0 - 8	1 - 3	4	1 - 3	4+	N=
Total	18.3%	15.3%	34.6%	15.7%	16.2%	132,835,687
White	16.6	14.6	35.7	16.0	17.1	114,290,384
Black	27.0	21.8	29.3	13.5	8.4	13,195,318
Hispanic	45.7	16.4	22.0	10.4	5.5	2,497,504
Native Amer.	25.0	19.5	31.3	16.5	7.7	715,458
Asian & Pac. Isle.	16.4	8.8	24.7	17.2	32.9	2,137,023

Indiana

	Elem.	High School		College		
	0 - 8	1 - 3	4	1 - 3	4+	N=
Total	16.6%	17.1%	41.7%	12.1%	12.5%	3,135,772
White	16.1	16.6	42.4	12.1	12.8	2,903,445
Black	21.0	24.7	34.3	12.9	7.0	200,639
Hispanic	41.5	16.6	26.8	8.9	6.3	13,461
Native Amer.	21.5	24.2	33.3	14.4	6.7	5,238
Asian & Pac. Isle.	13.3	9.1	19.5	12.0	46.0	12,989

Four Largest Indiana Counties: Marion, Lake, Allen & St. Joseph

	Elem.	High School		College		
	0 - 8	1 - 3	4	1 - 3	4+	N=
Total	15.3%	17.4%	39.1%	13.9%	14.1%	1,041,750
White	14.0	16.0	40.4	14.1	15.4	863.069
Black	20.8	25.0	34.2	13.2	6.8	160,702
Hispanic	41.5	18.0	26.7	8.6	5.1	10,361
Native Amer.	19.0	22.0	31.5	17.6	10.0	1,850
Asian & Pac. Isle	13.9	9.1	18.2	13.8	45.0	5,771

SOURCE: 1980 U.S. Census Reports.

In all of the adult (25 years old or older) populations shown above, a much higher proportion of Whites than Blacks completed high school, proportionately more Blacks are high school dropouts, and a higher proportion of Asian Americans have attained a bachelors or higher degree. (See Section 2C.)

B. K-12 Enrollment

The number of public school students in Indiana has been declining and, with the exception of cyclical periods of retracement, are projected to continue to decline to at least the year 2004 (See Figure 1). However, the percent of Minority students is projected to increase throughout the foreseeable future. Each lower grade has a higher proportion of minority students, which will result in a higher proportion of Minorities in upper grades and among high school graduates in the years to come. Examples which illustrate these findings are presented below for enrollments in the 1st, 8th and 12th grades.

TABLE 9

ENROLLMENT OF INDIANA STUDENTS IN 1ST, 8TH & 12TH GRADES BY WHITE & MINORITY GROUPS FOR YEARS 1985 AND 2004

Grade	Year	Total Number	White Non-Hispanic	All* Minorities
1st Grade	1984	76,254	65,289	10,965
	2004	69,101	56,753	12,348
	Change	-7,153	-8,536	+1,383
8th Grade	1984	79,906	70,379	9,527
	2004	66,027	54,973	11,054
	Change	-13,879	-15,406	+1,527
12th Grade	1984	68,646	61,470	7,176
	2004	58,961	50,539	8,422
	Change	-9,685	-10,931	+1,246

*Projections of 1st graders (1985-1990), 8th graders (1985-1997) and 12 graders (1985-2000) are based on the number of actual live births through 1984 with the projected numbers of students for later years based on birthing patterns.

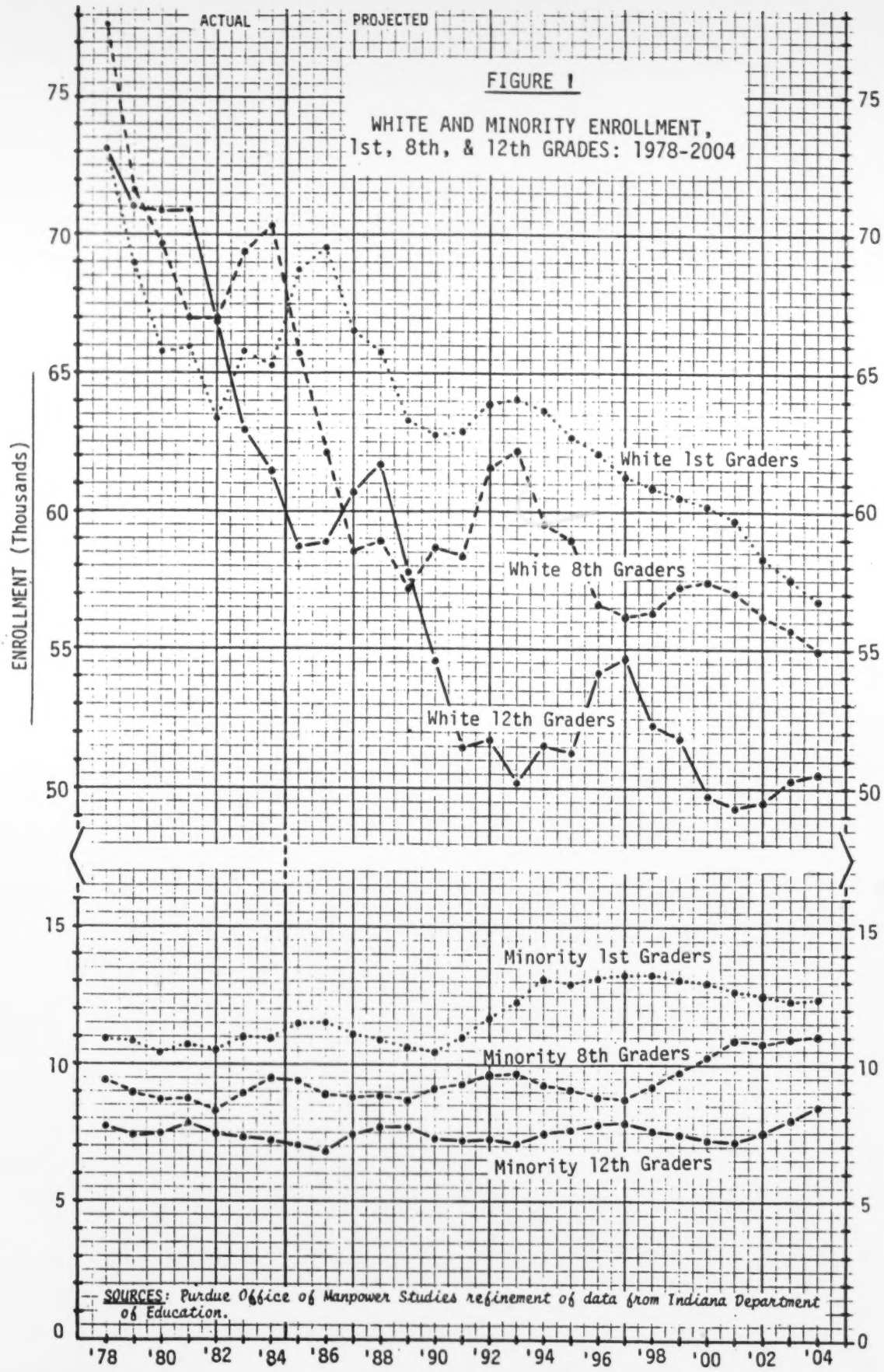
SOURCE: Indiana Dept. of Education EIR-1 Reports.

Note that all of the above projection for 1st, 8th and 12th grade students show
(1) A decrease in the total numbers at each grade level,
(2) A larger decrease of White students than the total decrease, because of
(3) An increase in the actual numbers of Minority students.

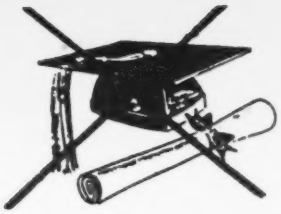
The larger numbers of Minorities in the successively lower grades show that this trend will accelerate over time. Note also that, by the year 2004, about 18% of the first grade class will be made up of Minorities. However, some counties, such as Marion, Lake, Allen, St. Joseph and Vanderburgh, will have much higher ratios of minorities to White students. (The Indianapolis school system is already more than 50% Minority.)

Projections of 12th graders and high school graduates show that a rather steady decline can be anticipated. There were approximately 68,600 students in the 12th grade in 1984-85 and 66,300 graduates. With a few minor bumps, a decline to almost 59,000 students in the 12th grade is projected by the year 2004 (a 14% reduction).

Figure 1 on the next page graphically illustrates the downward trend of total numbers of students in the 1st, 8th and 12th grades: actual numbers from 1978 thru 1984, projected numbers through the year 2004. However, the numbers of Minority students actually grow over this period, thereby becoming a larger proportion of the total. The larger numbers at each lower grade level indicate the proportion of Minorities will become larger over time.



SOURCES: Purdue Office of Manpower Studies refinement of data from Indiana Department of Education.



C. Secondary School Dropout

(1) General Situation

Of special concern with an increasing proportion of ethnic-minority public school students are their higher secondary education dropout rates. Although the graduation rates of Black and Spanish persons seem to have improved slightly since the mid-1970s, these groups' rates are still well below the rate for White students.[1/] According to the 1980 U.S. Census, secondary school dropout is especially high for Hispanic and Native American students. Moreover, ethnic-minority students (except for Asian Americans) are more likely to be retained at a grade level rather than being promoted to the next one along with their class.

In a major survey of educators, a profile of high school dropouts has been formulated:

> High school drop-outs have a rather typical profile. They are usually from low-income or poverty settings, often from a minority group background (although not often Asian-American), have very low basic academic skills, especially reading and math, have parents who are not high school graduates and who are generally uninterested in the child's progress in school, and do not provide a support system for academic progress. English is often not the major language spoken in the home, and many are children of single parents. Dropouts are heavier among males than females -- males tend to leave school to get a job (which usually turns out to be a failure), while females tend to drop out in order to have a child. Drop-outs are generally bored in school, they perceive themselves accurately as failures in the school culture, and are usually very alienated from school.[2/]

One widely-held view among the interviewed educators was that intervention occurs too late during a student's development, with certain parts of the profile of the dropout-prone student visible as early as the third grade. "To allow these sores to fester until the eleventh grade is to virtually guarantee that the student will drop out."[2/]

> Many localities have developed excellent drop-out prevention programs. Particularly useful are the programs which combine intensive, individualized training in the basic skills with work-related projects. Vocational education and work-study strategies seem to work well, as does the "alternative high school" pattern. When the relation between education and work becomes clear, most of these potential drop-outs can be motivated to stay in school and perform at a higher level.
>
> . . . More and more sophisticated counselling was mentioned often, as was a variety of efforts to coordinate the work of family, school and social welfare agencies in keeping potential drop-outs in school, and increasing their educational success.
>
> We also discovered a widespread concern that the current state of state-based "reform" legislation will only increase the group of push-outs to be added to the drop-outs. Eliminating low performers from the public schools was seen as a way of displacing the problem, not solving it. Out of school, these students present more of a social and economic problem than they do IN schools. If there were other institutions that formed a "safety

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1/ *Carnegie Foundation for the Advancement of Teaching, "Planning for the Future." Change, May/June 1985, pp.31-32.*

2/ *Harold L. Hodgkinson, All One System: Demographics of Education, Kindergarten through Graduate School. The Institue for Educational Leadership, Inc., Washington, D.C., 1985, pp. 11-12.*

net" to catch the drop-outs from schools, one might feel differently about it. But no such safety net exists, at least for educational purposes.

. . .Key to all of these early intervention programs is some form of home support.[2/]

(2) Indiana Dropouts

During the 1984-85 school year there were 20,680 dropouts from grades 7 through 12. This indicates a dropout rate of 4.48 percent of the 461,445 students. This dropout rate is an increase over 1981-82 and represents a reversal of a previously decreasing rate. Significantly, the dropout rate is much higher for Minority students. For example, the dropout rate for Hispanics in 1984-85 was 8.8%, which compares to only 4.2% of White students. The lowest rate (3.4%) is enjoyed by Asian students, which is lower than that of Whites or of any other minority.) Unless something is done to correct the higher dropout rates of certain Minorities, the overall State rate will go up as the numbers of Minorities continue to increase over time.

During the 1984-85 school year, students in the upper 25% of their class had a dropout rate of only .70 percent; this compares with a dropout rate of 10.34 percent for the lowest 25% of students which have a high proportion of Minorities. Of course, dropping out of high school is related to higher unemployment rates and lower wages (See Section 5 on Employment).

TABLE 10

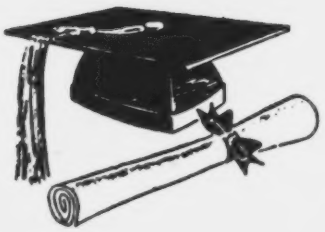
STUDENT WITHDRAWAL FROM GRADES 7-12[1/] FOR INDIANA BY ETHNIC GROUP[2/] 1978-79 TO 1984-85

	1978-79	1980-81	1982-83	1984-85
All Ethnic Groups				
# of Dropouts	28,237	12,001	18,483	20,680
# Enrollment	540,939	501,213	471,836	461,445
% Dropouts	5.2%	4.6%	3.9%	4.5%
White, NonHispanic				
# of Dropouts	23,504	18,899	15,259	17,055
# Enrollment	480,584	444,456	416,760	405,963
% Dropouts	4.9%	4.3%	3.7%	4.2%
Black, NonHispanic				
# of Dropouts	3,392	3,464	2,655	2,827
# of Enrollment	51,490	48,017	46,273	46,105
% Dropouts	7.6%	7.2%	5.7%	6.1%
Hispanic				
# of Dropouts	684	467	474	576
# of Enrollment	6,748	6,403	6,158	6,533
% Dropouts	10.1%	7.3%	7.7%	8.8%

1/ *Excludes "Other" non-school related reasons, which includes death, moving out-of-state, not enrolling in current school year (i.e., withdrawal after previous school year).*

2/ *Ethnic group numbers may not add up to totals because of missing data.*

SOURCE: *Student Dropout Data (EIR-6 Tabulations), Indiana Dept. of Education, Division of Educational Information & Research, 1985.*



D. College Enrollment

(1) General Situation

> Job requirements are changing and a more highly educated work force is necessary if Indiana is to be competitive in attracting and retaining desirable industries. Thus, increased and more effective participation in postsecondary education is critical to the future economic and social well-being of Indiana.
>
> ...Another essential educational task is the upgrading of current members of the workforce. ...As minorities become a large percentage of the Indiana work force, the education of minorities in Indiana becomes increasingly important for the future economic and social vitality of the state.[1/] (p. 5,19)

Participation in postsecondary education is especially critical for Indiana which seems to be experiencing a net loss (approximately 10%) of college-bound students.

While the number of high school graduates (and thus, potential immediate college-bound students) has substantially decreased since 1979-80 and is projected to continue its decline, the number of graduating high school Minority students has been increasing both numerically and proportionately, especially among Blacks.[2-5/] However, the college enrollment of White high school graduates has been increasing slightly numerically and proportionately, while Minority enrollment also increased but peaked in 1980 and has since declined, especially for Black high school graduates.[1,2-6/] Minorities are becoming increasingly under-represented in postsecondary education, except for Asian Americans.

In Indiana, Black college enrollment declined almost 16 percent from 1980-81 to 1984-85.[7/] This decline is especially important to Indiana because of the increasing representation of Minorities in the potential college-bound population and because of Indiana's college attendance rate being well below that of

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1/ Indiana Commission for Higher Education, Annual Report (Draft), Indianapolis, In, March, 1986.

2/ The College Board, Minority Enrollment in Higher Education Institutions: A Chronological View (Final Draft). New York: The College Entrance Examination Board, Sept. 9, 1985.

3/ Harold L. Hodgkinson, All One System: Demographics of Education, Kindergarten through Graduate School. Washington, D.C.: Institute for Educational Leadership, Inc., 1985.

4/ Indiana Commission for Higher Education, Final Report on Minority Student Participation, Nov. 1984.

5/ Ian McNett, Demographic Imperatives: Implications for Educational Policy (Report of the Forum on "The Demographics of Changing Ethnic Populations and their Implications for Elementary-Secondary and Postsecondary Educational Policy"). American Council on Education, Forum of Educational Organization Leaders, and Institute for Educational Leadership, 1983.

6/ Alecia Swasy, "Universities and Federal Government Score Low in Enforcing Order to Boost Minority Enrollment." The Wall Street Journal, Thursday, Aug. 22, 1985, p. 42.

7/ Phil Fernandez, "Minorities May Fear Purdue's Math." Journal and Courier, Thursday, Jan. 16, 1986. (Indiana Commission for Higher Education Data)

the nation,[8] 68 percent versus 82 percent for Indiana and the U.S., respectively, in 1982, ranking Indiana 33rd.[9]

Two other phenomena of major importance have also been observed. First, a growing proportion of enrollment in higher education is shifting from full-time to part-time.[2] This decline is especially important for the future because more than half the higher education enrollment of the two fastest growing ethnic groups (Asian American and Hispanic) is part-time -- and the other ethnic groups are not far behind.

Second, enrollment in four-year institutions has been declining while enrollment in two-year institutions has been increasing. This decline occurred for all major ethnic groups, except Hispanics and Native American, who were already predominately enrolled in two-year institutions (this latter was also the case with low socio-economic status students)[11] From 1976 to 1982 total enrollment in four-year colleges grew just under 8 percent while total enrollment in two-year colleges grew more than 21 percent. For Minorities the four-year growth was 15 percent, while the two-year growth was 30 percent. These national trends apply also to Indiana where a higher proportion of Black students were pursuing certificate and associate degree educational levels in 1982 than in 1980.[4] Finally, the underrepresentation of Minorities in higher education has become extended beyond the four- and two-year institutions to all postsecondary educational programs.[12]

One of the most frequently identified "causes" for low Minority participation in higher education is inadequate or inappropriate financial aid.[2,3,7,13,14] Finacial aid is necessitated by inadequate socio-economic resources,[2,11] often made worse by fluctuating economic conditions.[2,4] Because of the student's socio-economic background, the mix within the financial aid package is also highly important: grants, loans, work-study, etc.[4] "A debt load of up to $10,000 at the conclusion of a four-year degree program can prove a very strong deterrent to a lower

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8/ W. Vance Grant & Leo J. Eiden, Digest of Education Statistics. Washington, D.C.: National Center for Education Statistics, 1982, p. 14.

9/ The College Entrance Examination Board.

10/ The College Board, Equality and Excellence: The Educational Status of Black Americans. New York: The College Entrance Examination Board, 1985. (See Attachment I.)

11/ Valerie Lee, Access to Higher Education: The Experience of Blacks, Hispanics and Low Socio-Economic Status Whites. Washington, D.C.: American Council on Education, Division of Policy Analysis and Research, May 1985. (See Attachment III.)

12/ American Council on Education, "Dim Outlook for Minorities in Higher Ed Continues." Higher Education & National Affairs, Vol. 34 (No. 19), Oct. 14, 1985, pp. 1,5. (Newsletter of the ACE)

13/ Scott Jaschik, "Decline in Enrollment of Blacks Seen Unless States Start New Programs." The Chronicle of Higher Education, Jan. 8, 1986.

14/ Joseph Marks, The Enrollment of Black Students in Higher Education: Can Declines Be Prevented? The Southern Regional Education Board, 1985. (Reported in The Purdue Exponent, Friday, Jan. 24, 1986)

income person whose annual family income is half that amount."[2] (pp. 13-14) Another causal factor is the lack of a perceived relationship between a college degree and a good job,[3,4] and "it is most difficult for a low income minority young person to take a long term view when he or she has immediate needs for funds to support themselves and/or their family".[2] (p.16) In addition, there often exists inadequate high school academic and career counseling[3,4] and thus inadequate or incorrect academic preparation,[4,7,13] as well as higher admissions standards of educational institutions.[14]

With the decrease in the number of high school graduates, another explanation for lower participation rates is greater competition for the students' services, especially by the armed forces and business or industry.[2] However, offsetting some of the losses of high school graduates participation, will be an increase in the numbers of adults participating in higher educational efforts.

> Lifelong learning is here today for about half of the American adult population—ready or not. Colleges and universities are a part of this picture, but only a part.... Given the demography plus the disaggregation of the providers of educational services, the portion of the total pie for colleges and universities will continue to decline...
>
> It is also clear that for the next decade, the only growth area in education will be in adult and continuing education, with increases in elementary schools in certain regions....This is why by 1992, half of all college students will be over 25 and 20% will be over 35.[3] (pp.3,16)

> A strong growth market in higher education during the decade will be the adult learner -- probably a worker, probably a head of household, and probably a woman or minority....And higher education has lost and will continue to lose "market share" as the number of adults engaged in serious education and training programs continues to increase.... The other alternative is to stick with familiar programs and students, as long as institutions plan for a smaller student body with very different characteristics.[11] (p.6)

Increasing Minority enrollment (admission) in higher education is only the first step, however. Students who participate must persist and graduate in their educational programs.[12] Reasons for dropping out of higher education tend to be the same ones as those keeping other potential students from even enrolling, such as insufficient funds, inadequate high school preparation for college, and inadequate counseling[14], as well as a scarcity of appropriate role models[5,14] and social/cultural adjustment problems.[5]

College retention and graduation is especially serious for Minorities and low socio-economic status (SES) Whites who, since 1975 have been twice as likely as high-SES Whites to no longer be enrolled two years after entrance. Although Blacks' college graduation rates increased significantly from the mid-1960s through 1970,[14] they have declined since 1975.[10] Moreover, while enrollment in two-year institutions has been increasing, retention rates are lower than for four-year institutions, especially for Black students.[10]

"In our increasingly technological society, choice of fields is an important dimension of equality"[5] (p.6). Although over the past decade Blacks have become more similar to Whites in the fields of study in which they receive their higher education degrees, at each postsecondary educational level Blacks are under-represented in math- and science-related degree fields.[10] Rather, degrees of Blacks are still concentrated in education, the humanities, and the social sciences, where salaries tend to be lowest and unemployment rates highest of degree occupations. These occupational choices are influenced by, among other things, parental education and their own early educational preparation and achievement.

> ...We need to make a major commitment, as educators, to see that all our students in higher education have the opportunity to perform academically at a high level. There will be barriers of color, language, culture, attitude that will be greater than any we have faced before, as Spanish-speaking students are joined by those from Thailand and Vietnam. The task will be not to lower the standards but to increase the effort. To do so will be to the direct benefit of all Americans, as a new generation of people become a part of our fabric, adding the high level of energy and creativity that has always been characteristic of groups who are making their way in America. Their numbers are now so large that if they do not succeed, all of us will have diminished futures. That is the new reality.[3] (p.18)

(2) College Enrollment in Indiana

As stated in the previous section, the college attendance rates of Indiana high school graduates have persistently fallen below National and Mid-western Regional averages. However, there have been differences in what types of postsecondary institutions are included in calculating the "college" or "postsecondary" attendance rates. Table 11 illustrates this point. Therefore, it is necessary, when comparing rates, to assure that the same defined populations are included or excluded.

TABLE 11

INDIANA HIGH SCHOOL GRADUATES' COLLEGE ENROLLMENT RATES

1984 GRADUATES - 67,445				1985 GRADUATES - 64,904		
Number of Graduates Enrolling	Cumulative Number	Cumulative Percent	Type of Institution	Number of Graduates Enrolling	Cumulative Number	Cumulative Percent
24,063	24,063	35.7%	4-Year	24,261	24,261	37.4%
3,280	27,343	40.5	< 4-Year	2,978	27,239	42.0
5,271	32,614	48.4	Voc'l.-Tech	5,065	32,304	49.8
1,787	34,401	51.0	Business	1,925	34,229	51.9
944	35,345	52.4	Nursing	847	35,076	54.0
3,641	38,986	57.8	Military	3,576	38,652	59.5

SOURCE: Indiana Department of Education, Div. of Educational Information and Research, Indianapolis, In.

The above data show that although fewer H.S. graduates were enrolled in the five listed types of post-secondary institutions in 1985 than in 1984, a higher percent of graduates attended these institutions in 1985 than in 1984. Of course this is because the number of graduates decreased from 67,445 in 1984 to 64,904 in 1985. The largest percentage and numerical enrollment increases were in 4-year institutions (which is a change over previous years, when the less-than-4-year institutions gained most). Business schools and military service also showed gains in 1985 over the previous year.

For a review of college enrollments in Indiana from 1977-78 to 1984-85, see Table 12 on the following page.

TABLE 12

INDIANA HIGH SCHOOL GRADUATION RATES, HIGHER EDUCATION ENROLLMENT, AND MILITARY ENLISTMENT: 1977-78 TO 1984-85

School Year	Total Number of Graduates	Graduates Enrolled in Higher Education Institutions[2]							Military Enlistment	
		Total		4-yr. Inst.	Percent Voc'l/ Tech.	Percent Business School	Percent Nursing School	Percent Other Inst.		
		Number	Percent[3]						Number	Percent
1977-78	77,134	33,834	43.86%	32.88%	5.30%	2.17%	1.20%	2.32%	2,010	2.61%
1978-79	77,418	34,765	44.91%	33.37%	5.40%	1.98%	1.06	3.09%	1,941	2.51%
1979-80	75,639	34,250	45.28%	32.90%	5.87%	2.15%	1.16%	3.20%	2,267	3.00%
1980-81	75,557	36,928	48.87%	34.91%	7.03%	2.34%	1.23%	3.43%	2,852	3.78%
1981-82	76,032	35,098	46.16%	32.32%	6.69%	2.28%	1.32%	3.55%	3,148	4.14%
1982-83	72,560	35,615	49.08%	34.12%	7.36%	2.39%	1.38%	3.83%	3,971	5.47%
1983-84	67,445	35,345	52.41%	35.68%	7.82%	2.65%	1.40%	4.86%	3,641	5.40%
1984-85	64,904	35,076	54.04%	37.38%	7.81%	2.97%	1.30%	4.59%	3,576	5.51%

[1] *Regular + (mid-term) special graduates, excluding GEDT graduates.*
[2] *Excluding military enlistment.*
[3] *Percent of graduates.*

SOURCE: Indiana Dept. of Education, Division of Educational Information and Research, Indianapolis, In.

The numbers of Indiana high school graduates declined 14.6% (11,128 students) between 1981-82 and 1984-85 (from 76,032 to 64,904). With a few aberations, this decline is projected to continue to drop, falling below 50,000 by the year 2,000 (also see Figure 1 in Section2). However, since 1981-82 there has been an increase in the percentage of high school graduates attending higher education institutions from 45% to 54%, so that the numbers who have enrolled have remained relatively constant at about 35,000. It is expected that this number will begin a decline in the imminent future. Part of the loss will probably be filled by an increasing number of working adults and part-time students.

The numbers (and percentages) of minorities attending various Indiana institutions of higher education vary significantly (see Table 13 on the next page).

TABLE 13

ENROLLMENT AT SELECTED INDIANA INSTITUTIONS OF HIGHER EDUCATION RANKED BY NON-FOREIGN MINORITY REPRESENTATION: 1984

(INSTITUTIONS WITH MORE THAN 80 MINORITY STUDENTS)

Institution	Total Number (100%)	White*		MINORITIES						
		Number	% Total	All Minorities Number	All Minorities % Total	Percent Black	Percent Hispanic	Percent Native Amer.	Percent Asian Amer.	Percent Foreign Students*
Martin Center College	140	11	7.9%	129	92.1%	92.1%	-	-	-	-
Clark College	537	216	40.2	308	57.4	55.7	.9%	-	.7%	2.4%
IVTC - Northwest	3,314	1,928	58.2	1,386	41.8	32.5	8.5	.5%	.4	-
IU - Northwest	4,686	3,232	69.0	1,435	30.6	23.0	6.8	.1	.7	.4
Calumet College	1,130	842	74.5	287	25.4	11.5	13.6	-	.3	.1
IVTC - Central	4,427	3,402	76.8	1,025	23.2	21.5	.8	.4	.5	-
Purdue - Calumet	7,446	6,325	84.9	1,113	14.9	7.5	6.5	.2	.8	.1
ISU - Terre Haute	11,618	9,185	79.1	1,229	10.6	7.8	.4	.2	2.2	10.4
IUPUI - Indianapolis	23,366	20,659	88.4	2,463	10.5	7.6	.8	.2	2.0	1.0
Marian College	1,044	917	87.8	110	10.5	9.4	.5	-	.7	1.6
IVTC - North Central	2,352	2,154	91.6	198	8.4	6.3	.7	1.1	.3	-
IVTC - East Central	1,824	1,672	91.7	152	8.3	7.7	.1	.4	.2	-
IVTC - Northeast	3,318	3,065	92.7	253	7.6	6.5	.5	.1	.5	-
Indiana Central Univ.	2.999	2,764	92.2	225	7.5	5.3	.6	1.0	.6	.3
U. of Notre Dame	9,461	8,433	89.1	674	7.1	2.2	3.1	.3	1.5	3.7
Anderson College	2,022	1,841	91.0	141	7.0	4.2	.2	2.3	.3	2.0
IU - Bloomington	32,715	28,480	87.1	2,256	6.9	4.3	1.1	.2	1.3	6.0
ITT Tech. Inst.-Ft. Wayne	1,252	1,166	93.1	86	6.9	6.3	.3	-	.2	-
Butler Univ.	4,030	3,744	92.9	270	6.7	4.8	.9	.1	.9	.4
Purdue - W. Lafayette	31,852	28,395	89.1	1,956	6.1	3.0	1.2	.2	1.7	4.7
IVTC - Kokomo	1,388	1,303	93.9	85	6.1	4.6	.7	.4	.4	-
Vincennes Univ.	6,688	6,144	91.9	404	6.0	5.5	.2	.0	.2	2.1
IU - South Bend	5,442	5,142	94.5	281	5.2	3.9	.6	.1	.6	.3
IVTC - Wabash Valley	1,667	1,583	95.0	84	5.0	3.6	.6	.5	.4	-
IUPU - Fort Wayne	10,171	9,648	94.9	486	4.8	3.5	.6	.1	.6	.4
Ball St. Univ.	17,370	16,401	94.4	787	4.5	3.2	.6	.3	.5	1.0
Purdue - North Central	2,616	2,508	95.9	108	4.1	2.4	1.0	.2	.6	-
U. of Evansville	4,208	3,825	90.9	149	3.5	2.8	.2	.1	.4	5.6
IU - Kokomo	2,499	2,408	96.4	86	3.4	1.8	.9	.4	.4	.2
ISU - Evansville	3,848	3,692	95.9	126	3.3	2.7	.2	.1	.3	.8
Valparaiso Univ.	3,958	3,753	94.8	114	2.9	1.4	.6	.4	.6	2.3
IU - Southeast	4,399	4,283	97.4	108	2.5	1.8	.2	.2	.3	.2

* *Not included in White or Minorities' data, but included in Total Number.*

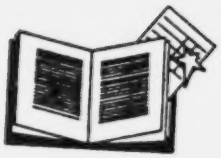
Source: U.S. Dept. of Education's Office for Civil Rights. Reported in Chronicle of Higher Education, Dec. 5, 1984, p.13.

Minority enrollment in Indiana higher education is spread throughout a number and variety of institutions. The largest concentrations (percentages) of minority students in 1984 were found in Martin Center College, Clark College, IVTC-Northwest, IU-Northwest, Calumet College, IVTC-Central, and Purdue-Calumet. However, the largest numbers of minority students were found in IUPU-Indianapolis, IU-Bloomington, and Purdue - West Lafayette. Note also that 12.9 percent (3426) of IVTC'S 26,576 students were minorities, compared to 8.0 percent of Indiana's total number of students in higher education.

An excellent summary statement concerning the impact on higher education that increasing proportions of Blacks and Hispanics in Indiana's population will have is contained in the following excerpt from the most recent annual report of the Indiana Commission for Higher Education:

> Increasing Minority Enrollment in Higher Education
>
> After reaching a peak enrollment of 20,711 (7.7% of total enrollment) in 1980-81, black enrollment in Indiana higher education has declined each succeeding year. In 1983-84, the percentages of Blacks enrolled in higher education was 6.7% of total enrollment. Meanwhile in 1980 Blacks represented 7.6% of those in the age group 15-19. The general trend in participation in higher education by Hispanics is even worse.
>
> As minorities become a large percentage of the Indiana work force, the education of minorities in Indiana becomes increasingly important for the future economic and social vitality of the state.
>
> Conclusion: Increased and more effective participation in higher education by Indiana's minority population is essential if the skilled work force necessary for continued economic growth is to be available in Indiana.[1] (p.19)

3. STUDENT ACADEMIC PREPARATION



A. Tested Ability or Achievement

(1) Reading Proficiency: National Assessment.

> The past decade and a half has been a period of considerable change and turmoil in American education. The social and educational reforms of the late 1960s and early 1970s were followed first by the back to basics movement, and later by the reaffirmation of traditional academic goals as the central focus of schooling. The trends in reading proficiency between 1971 and 1984 suggest that these broad movements have indeed had their effects on improved student achievement.[1] (p. 7)

This National Assessment generally found better reading proficiency for students tested (among 9, 13 and 17-year olds) but, significant to this study, reported major differences between average reading proficiency among White, Black and Hispanic students.[1] These differences in scores are apparent in Table 14 and Figures 2A and 3, where it can be seen that the reading proficiency of Black and Hispanic students, despite some improvement, is approximately the same as White students three to four years younger. Thus, minority students tend to read at approximately one proficiency level below White students.

TABLE 14
READING PROFICIENCY TEST SCORES - 1984[1]

	9-year-olds	13-year-olds	17-year-olds
National Aver.	213.2	257.8	288.2
By Race:			
White	220.1	263.4	294.6
Hispanic	193.0	239.2	268.7
Black	188.4	236.8	263.5

"White" includes all students not Black or Hispanic (i.e. Asian, Native American).

Definitions (range of 0 to 500)
150 - Rudimentary -- carry out simple, discrete reading tasks,
200 - Basic -- understand specific or sequentially-related simple information,
250 - Intermediate -- search for specific information, interrelate ideas, and make simple generalizations,
300 - Adept -- find, understand, summarize, and explain relatively complicated information, and
350 - Advanced -- synthesize and learn from specialized and complex reading materials.

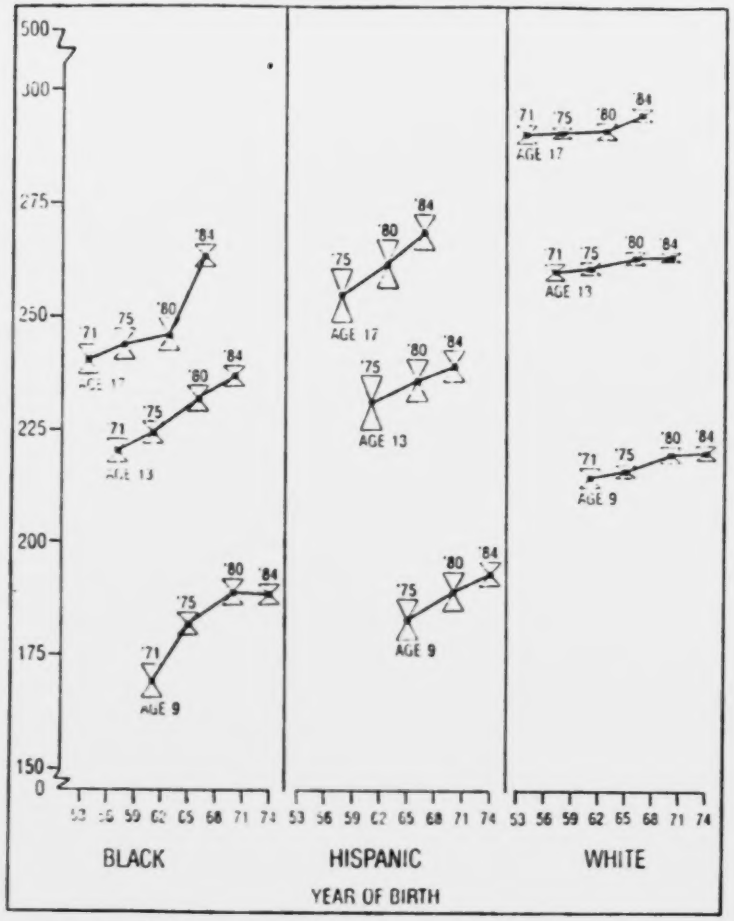
NOTE: Comparable data for Indiana were not available to the authors.

Of special concern is that, among pre-high school students (13-year-olds), whereas two of three White students are able to read at the Intermediate level, only one of three Black and Hispanic students are able to do so. Moreover, among pre-college students (17-year-olds), while almost half the White students can read at the Adept level, only one of five Black and Hispanic students can do so. Finally, critical to the question of ability to do college-level work, of the 17-year-olds, only one out of 17 White students and one out of 100 Minority students can read at the Advanced-proficiency level. (These proficiency deficiencies are probably similar for other abilities.) In addition to the important differences in reading proficiencies between ethnic groups, there are also important differences by type of community. The lowest average reading proficiencies are apparent for students who live in a disadvantaged urban community; scoring slightly higher are those in rural communities; and highest scores are made by student in advantaged urban communities. See Figure 2 on the next page.

[1] *National Assessment of Educational Progress, The Reading Report Card: Progress Toward Excellence in Our Schools. (Report No. 15-R-01). Princeton: Educational Testing Service, 1985. (See Attachment IV.)*

FIGURE 2A

Trends in Average Reading Proficiency for White, Black, and Hispanic Students by Year of Birth



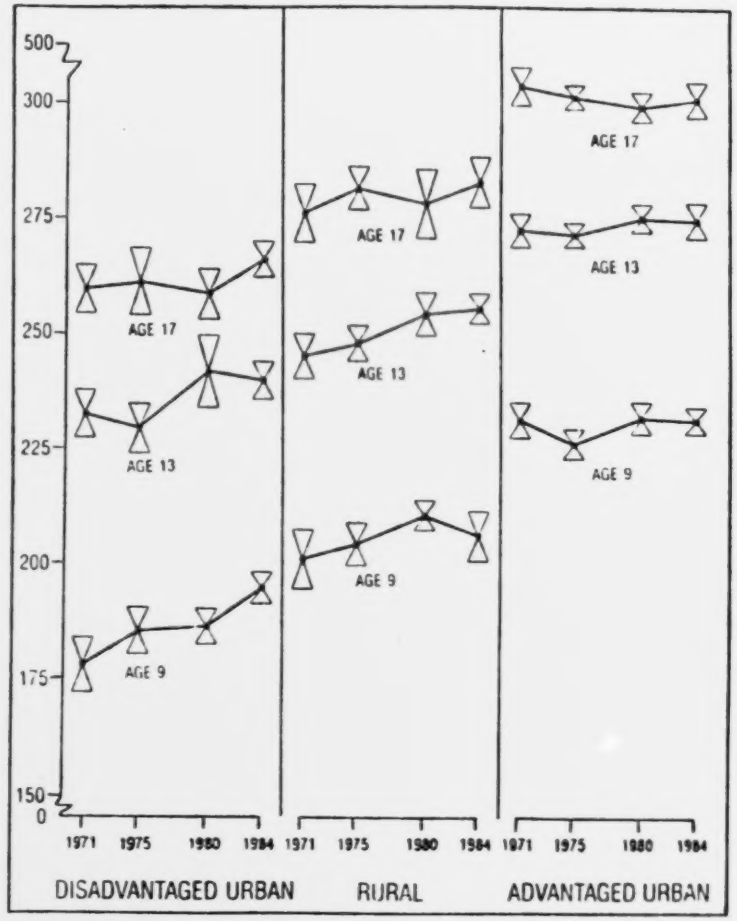
Birth Date Ranges: Age 9 Born Jan.-Dec. 1961, 65, 70, 74
Age 13 Born Jan.-Dec. 1957, 61, 66, 70
Age 17 Born Oct.-Sept. 1953-54, 57-58, 62-63, 66-67

naep

⧖ = estimated population mean reading proficiency and 95% confidence interval. It can be said with 95 percent certainty that the mean reading proficiency of the population of interest is within this interval.

FIGURE 2B

Trends in Average Reading Proficiency for Type of Community



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naep

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SOURCE: National Assessment of Educational Progress, The Reading Report Card: Progress Toward Excellence in Our Schools (Report No. 15-R-01). Princeton: ETS, 1985.

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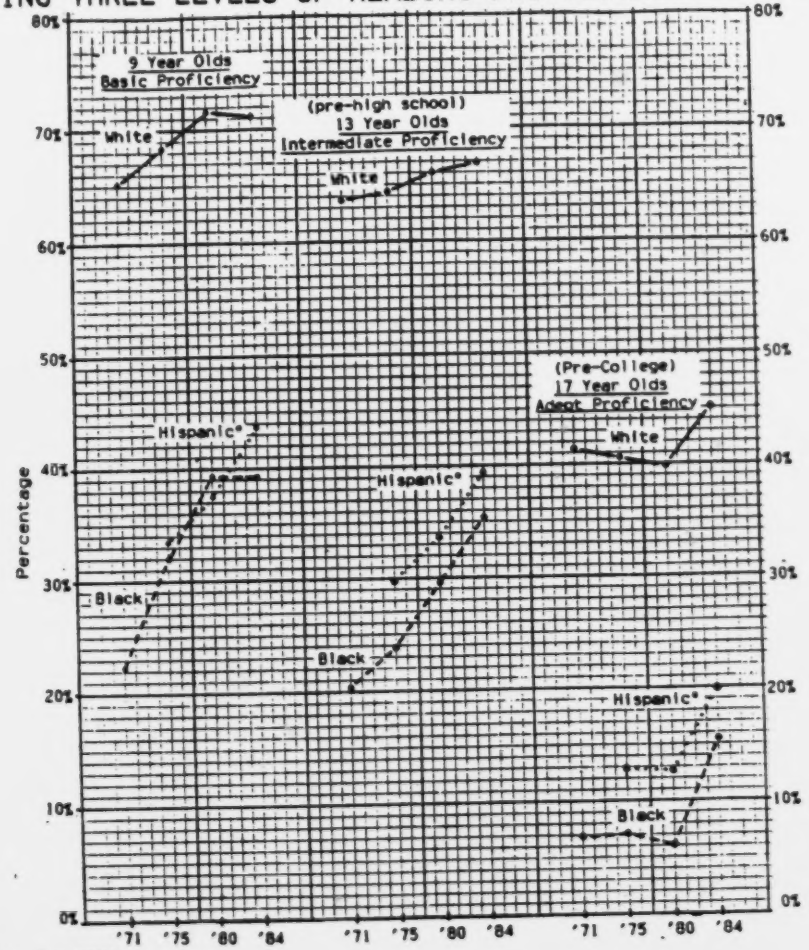
A comparison of three levels of reading proficiency by age and ethnic group reveals:

- A gradual improvement from 1971 to 1984,
- More White students score higher at all grade levels,
- Lower proportions of students score at each higher level, and
- Only 15% of Black and 20% of Hispanic (pre-college age) 17-year-olds, attain an "adept reading proficiency", as do fewer than 50% of White students.

FIGURE 3

PERCENT OF STUDENTS BY AGE AND ETHNIC GROUP EXHIBITING THREE LEVELS OF READING PROFICIENCY: 1971-1984



* No Hispanic data for 1971.

Basic Proficiency -- understand specific or sequentially-related simple information;
Intermediate Proficiency -- search for specific information, interrelate ideas, make simple generalizations;
Adept Proficiency -- find, understand, summarize, and explain relatively complicated information.

SOURCE: National Assessment of Educational Progress, The Reading Report Card: Progress Toward Excellence in Our Schools (Report No. 15-R-01). Princeton: Educational Testing Service, 1985. (See Attachment IV.)

The National Assessment made several observations with respect to influences on reading proficiency:

- The influence of home environment is apparent from the positive relationship between reading proficiency and both available reading material in the home and level of parental education....

- Six or more hours of TV viewing per day is consistently and strongly related to lower reading proficiency for all three age groups. In 1984, fully 27 percent of 9-year-olds reported watching more than six hours of television per day, up from 18 percent four years earlier.

- In general, students who receive homework assignments and do them tend to read better than students who do not have homework or who do not do it.[1] (p. 7)

However, with respect to developing reading proficiency, "the reduction of television watching in and of itself without substituting reading activities, homework, or other related experiences seems unlikely to be effective"(p. 55).

Results from the 1984 assessment

> suggest two agendas for the future: continued special attention to disadvantaged and minority children and increased emphasis on higher-level reading skills for all....
>
> Yet improvements in higher-level reading skills cannot come about simply by an emphasis on reading instruction in isolation from the other work students do in school. To foster higher-level literacy skills is to place a new and special emphasis on thoughtful, critical elaboration of ideas and understanding drawn from the material students read and from what they already know.[1] (p. 8)

(2) Standardized Achievement Tests: National

In an examination of the educational status of Black Americans,[2] the College Entrance Examination Board observed the following:

- The educational performance of black students in elementary and secondary schools, as measured by standardized achievement test scores, rose in many areas over the decade of the 1970s, but it remained lower than that of non-blacks by 1980.

- The strongest gains in mathematics and reading test scores were registered by young black students, particularly those from urban, disadvantaged communities....

- However, gains in mathematics and science were far less substantial than for reading, and black 17-year olds showed stable or declining scores on achievement measures in reading, mathematics, and science.

- Black students of all ages performed better in the area of mathematical knowledge (factual recall) than in the area of mathematical skills (performing computations and manipulations), and least well in the area of mathematical applications (the ability to solve problems and use mathematical reasoning). (pp. 6-7)

---

[2] The College Board, Equality and Excellence: The Educational Status of Black Americans (Draft). New York: The College Entrance Examination Board, Jan. 1985. (See Attachment I.)

A high level of academic ability is especially important for those students who plan or hope to continue their education beyond high school. However, ethnic-group differences observed with elementary and secondary school students are also evident with college students. For example, sophomores in Florida's public colleges and universities are required to pass all four parts of the state's "College-Level Academic Skills Test" before they can earn an associate-of-arts degree or continue as juniors.[3/] In the March 1985 administration, while 94 percent of White sophomores passed all four parts, 84 percent of Hispanics and 64 percent of Blacks passed all four.

Lastly, in a major study of access to higher education in 1980,[4/] it has been found that 7 of 10 "high-ability" high school seniors were still attending college two years after high school graduation, compared to only one of four "average-ability" seniors. High-ability seniors have also been twice as likely to major in technical fields than average-ability seniors. Moreover, students attending four-year colleges have scored higher on high school senior-year achievement tests than their two-year-college counterparts. Of special importance to the present report is the observation that Black and Hispanic students were the least represented high school seniors in the high-ability group.

(3) Scholastic Aptitude Test (SAT) Comparisions: U.S. & IN.

Since hitting an all-time low in 1980, scores on the College Entrance Examination Board's Scholastic Aptitude Tests (SATs) have steadily but gradually increased through 1985.[5,6/] Although the greatest increases have occurred for Minority students (those who anticipate a college education), they are still well below those for White students. The one exception involves Oriental Americans, who are comparable to White students. Although students since 1980 have been achieving improved SAT scores, their scores still remain well below the peak achieved in 1963. Similar results have also been observed with American College Testing program tests.[7/]

3/ Jean Evangelauf, "Sophomores in Fla. Public Colleges Must Pass a New Test of Their Academic Skills." The Chronicle of Higher Education, July 3, 1985, p. 10.

4/ Valerie Lee, Access to Higher Education: The Experience of Blacks, Hispanics and Low Socio-Economic Status Whites. Washington, D.C.: American Council on Education, Division of Policy Analysis and Research, May 1985. (See Attachment III.)

5/ Pat Ordovensky, "SATs Up 9, 'Education on Mend'." USA Today, Tuesday, Sept. 24, 1985.

6/ Bureau of the Census, Education in the United States: 1940-1983, Special Demographic Analysis (CDS-85-1). Washington, D.C.: U.S. Dept. of Commerce.

7/ W.B. Strange, "College Admissions Testing Programs" (Memorandum), Indiana Dept. of Education. Oct. 14, 1983.

About 34,525 Hoosiers took the SAT in 1985. The proportion of Hoosiers taking the test was higher than the National average, but Hoosier scores were lower (e.g., mean total SAT score was 906 Nationally and 875 for Indiana). The distribution by ethnic group of Hoosiers taking the 1985 SAT (self-reported by the students) was as follows:

White	82.2%	Black	5.1%	Hispanic	1.2%
Asian	.9%	American Indian	.3%	Other	.5%
		No Indication	9.8%		

With the exception of Asian-Americans, Minorities taking the SAT tests were under-represented (when compared to their proportion of the population). The highest scores were attained by Asian-Americans, followed by White students. The scores of Black students were lowest of all groups. With the exception of Asian-American students, more members of the other Minority groups indicated they expected they would need remedial help in Math, English and the Sciences.

TABLE 15

SCHOLASTIC APTITUDE TEST (SAT) AVERAGES FOR THE UNITED STATES AND INDIANA BY ETHNIC GROUP, 1976-1985

		VERBAL								MATHEMATICS							
		Year Spring H.S. Seniors				Mean-Point Change			S.D.		Year Spring H.S. Seniors				Mean-Point Change			S.D.
	Geo. Area	'76	'80	'84	'85	'76-'85	'80-'85	'84-'85	'85	Geo. Area	'76	'80	'84	'85	'76-'85	'80-'85	'84-'85	'85
Total Population	U.S.	431	424	426	431	0	+7	+5	110	U.S.	472	466	471	475	+3	+9	+4	119
	IN	415	407	410	415	0	+8	+5	99	IN	460	450	454	460	0	+10	+6	112
White	U.S.	451	442	445	449	-2	+7	+4	103	U.S.	493	482	487	491	-2	+9	+4	114
	IN	428	418	420	425	-3	+7	+5	96	IN	475	462	465	470	-5	+8	+5	109
Minority*	U.S.	350	343	349	359	+9	+16	+10	134	U.S.	389	388	406	411	+22	+23	+5	139
	IN	347	334	353	355	+8	+21	+2	116	IN	381	371	394	407	+26	+36	+13	132
Black	U.S.	332	330	342	346	+14	+16	+4	96	U.S.	354	360	373	376	+22	+16	+3	96
	IN	329	320	331	336	+7	+16	+5	85	IN	353	350	362	369	+16	+19	+7	96
Hispanic*	U.S.	369	365	368	377	+8	+11	+9	102	U.S.	407	407	415	423	+16	+14	+8	107
	IN	353	360	378	383	+30	+23	+5	96	IN	393	403	423	418	+25	+15	-5	108
Oriental American	U.S.	414	396	398	404	-10	+8	+6	130	U.S.	518	509	519	518	0	+9	-1	127
	IN	422	402	397	426	+4	+24	+29	129	IN	506	496	491	515	+9	+19	+24	146

*Estimated U.S. - United States IN - Indiana S.D. - Standard Deviation

SOURCE: College Entrance Examination Board, Admissions Testing Program.

At least since 1976, Indiana high school seniors have attained lower SAT score averages than U.S. students in general. These average score differences are due primarily to score differences between Indiana and U.S. White students. Although SAT scores had been declining, the last four years have witnessed increases in SAT scores. However, White student scores are still slightly below the 1976 averages, while scores for Minority groups (especially Blacks, Hispanics, and American Indians) are appreciably higher than their 1976 averages. This is true for both Indiana and the U.S. As a result, although average scores for Minority groups have been and remain appreciably below White student averages, the gap has been narrowing.

TABLE 16
SAT SCORE COMPARISONS FOR THE U.S. AND INDIANA BY ETHNIC GROUP, 1985

1985 Verbal SAT Scores		ETHNIC GROUP	1985 Math SAT Scores	
U.S.	IN.		U.S.	IN.
404	426*	Oriental American	518	515
445	420	White	491	470
368	378*	Hispanic	423	418
359	355	Total Minority	411	407
342	331	Black	376	369
431	415	Total Pop.	475	460

* It is apparent that in nearly all cases, Indiana students' scores were below those of the U.S. There are two notable exceptions, the Oriental Americans and Hispanics in Indiana score higher in the Verbal tests than the U.S. Also noteworthy is the fact that although White students in Indiana averaged more than 20 points below the U.S., the total Minorities in Indiana were only 4 points below the U.S.

An excellent statement concerning inadequate basic skill preparation is contained in the following excerpt from the most recent annual report of the Indiana Commission for Higher Education:

> Improving the Preparation of Students for College Level Work
>
> Through its analyses of minority participation and of the extent to which enrolled students are engaged in remedial work, the Commission has determined that a substantial problem impeding student success in Indiana higher education is inadequate basic skills preparation. The Commission believes that the basic skills needed for going to college are the same skills needed for entering the workplace.
>
> Conclusion: A comprehensive long-range plan for improving our students' preparation for college and for work is necessary.[1] (p. 9)

There are considerable variations between the mean total SAT scores and intended fields of study. Table 17 presents a U.S. rank order listing starting with a mean total score of 1075 for seniors who chose Physical Science, down to 737 for Trade/Vocational. The differences betwen U.S. and Indiana scores are shown for each field of study.

TABLE 17

AVERAGE TOTAL SCORES ON SCHOLASTIC APTITUDE TESTS BY 1985 H.S. SENIORS' INTENDED FIELD OF STUDY.

	Total SAT Score Means				Total SAT Score Means		
	U.S.	IN.	Diff.		U.S.	IN.	Diff.
Physical Sciences...	1075	1034	- 41	AVERAGE.....	906	875	- 31
Mathematics.....	1037	1004	- 33				
English.....	1025	1008	- 17	Computer Science.....	901	907	+ 6
Engineering.....	998	979	- 19	Psychology.....	895	882	- 13
Biological Sciences.	996	967	- 29	Geography.....	891	882	- 9
Foreign Language....	981	959	- 22	Theater Arts.....	888	879	- 9
History.....	981	897	- 84	Forestry/Conservation.	875	809	- 66
Philosophy/Religion.	970	937	- 33	Business.....	862	830	- 32
Social Sciences.....	947	899	- 48	Art.....	839	812	- 27
Undecided.....	934	894	- 40	Education.....	836	830	- 6
Library Science.....	929	908	- 21	Agriculture.....	833	825	- 8
Military Science....	912	936	+ 24	Home Economics.....	793	756	- 37
Architecture.....	910	893	- 17	Ethnic Studies.....	769	-	-
Health.....	909	887	- 22	Trade/Vocational.....	737	749	+ 12
Communications.....	906	874	- 32				
Music.....	906	883	- 23				

SOURCE: Admissions Testing Program, College-Bound Seniors, 1985: National & Indiana. New York: The College Board, Spet. 1985.

This can help one to form some generalizations about the relationships betwen SAT scores and intended fields of study. In general, and not surprising to most, is that Physical and Biological Sciences, Math, Engineering, English and Foreign languages are more likely to be chosen by high school seniors who achieve the highest SAT scores. The pattern of Hoosiers' SAT test scores (which are lower than the National averages), generally parallel the National listing, but there are some notable exceptions. Among major differences are History, Social Sciences, Forestry-/Conservation, and Home Economics where Indiana scores are much lower than the U.S. mean. "Bucking the trend" are Military Science, Computer Science, and Trade/Vocational, where Hoosiers actually score higher than the U.S. mean.

(4) American College Testing (ACT) Program: U.S. & Indiana

TABLE 18

AMERICAN COLLEGE TESTING (ACT) AVERAGES FOR THE UNITED STATES AND INDIANA: 1970, 1976, 1980 AND 1983

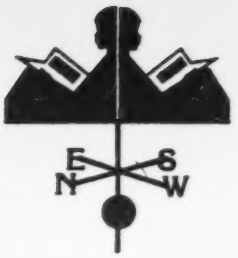
Test	Geo. Area	Year, Spring U.S. Seniors '70	'76	'80	'83
English	U.S.	18.5	17.5	17.9	17.8
	IN.	18.9	18.3	18.3	18.4
Math	U.S.	20.0	17.5	17.4	16.9
	IN.	20.8	18.3	17.9	18.1
Social Studies	U.S.	19.7	17.0	17.2	17.1
	IN.	20.5	18.5	18.0	18.0
Science	U.S.	20.8	20.8	21.1	20.9
	IN.	21.0	21.4	21.4	21.5
Composite	U.S.	19.9	18.3	18.5	18.3
	IN.	20.5	19.3	19.0	19.1

SOURCE: W. B. Strange, "College Admissions Testing Programs" (Memorandum), Indiana Dept. of Education, October 14, 1983.

Although Indiana students across the years have consistently scored on average below U.S. students in general on SAT's, they have consistently scored above average on the ACT scales. Note that, while nearly 120 percent of Indiana college-bound high school seniors have tended to take the SAT (well above the national average), less than 10 percent have tended to take the ACT program tests (below the national average), although this percentage almost doubled in 1982-83. Thus, Indiana college-bound students are probably closer to the national average of measured ability or achievement than either set of tests indicate.

Both Indiana and the U.S. in general experienced a major decline in average scores across the years from 1970 through 1983 for the Math, Social Studies and Composite ACT scores, as well as a slight decline for English scores and no change or slight increase for Science scores.

B. Educational Needs



(1) Reading Proficiency

> American schools can ... take considerable pride in the improving trends in students' reading proficiency over the past 13 years. At the same time, the results from the 1984 assessment suggest two agendas for the future: continued special attention to disadvantaged and minority children and increased emphasis on higher-level reading skills for all....
>
> Attention to ... higher-level reading skills has already begun in many schools across the country; the challenge will be to ensure that all students have the opportunity to develop such skills. There has been a conceptual shift in the way many researchers and teachers think about reading, which gives students a much more active role in the learning and reading comprehension process. This shift is reflected in changes from packaged reading programs to experiences with books and from concentration on isolated skills to practical reading and writing activities.
>
> Yet, improvements in higher-level reading skills cannot come about simply by an emphasis on reading instruction in isolation from the other work students do in school. To foster higher-level literacy skills is to place a new and special emphasis on thoughtful, critical elaboration of ideas and understandings drawn from the material students read and from what they already know. They must learn to value their own ideas and to defend as well as question their interpretations in the face of alternative or opposing points of view. ... In developing higher-level reading skills and strategies, students will benefit from experience with a wide range of challenging materials....
>
> There are opportunities for such experiences in all of the subjects students study in school, as well as in what they read at home. They can learn to develop their own interpretations of what they read, to question, rethink, and elaborate upon the ideas and information drawn from their reading experiences -- in conversations with their friends, in discussions with their teachers, and in the writing they do for themselves and others. And in that process, students will also be acquiring the higher-level reading comprehension skills that so many are presently lacking[1] (pp. 8-9, underline added)

A major review study of the quality of various academic skills found that

> Disappointing trends in performance for older students, both black and white, and on higher order cognitive tasks in reading, writing, mathematics, and science reflect disturbing changes in educational methods over the last decade. Between 1972 and 1980, use of teaching methods that might encourage the development of higher order thinking abilities -- project or laboratory work, writing tasks, and student-centered discussion -- declined in public high schools.[2] (p. 7)

(2) Inadequate Academic Preparation

> Through its analyses of minority participation and of the extent to which enrolled students are engaged in remedial work, the Commission has determined that a substantial problem impeding student success in Indiana higher education is inadequate basic skills preparation. The Commission also believes that the basic skills needed for going to college are the same basic skills needed for entering the workplace.[3] (p. 9)

1/ *National Assessment of Educational Progress, The Reading Report Card: Progress Toward Excellence in Our Schools. (Report No. 15-R-01).*

2/ *The College Board, Equality and Excellence: The Educational Status of Black Americans. New York: The College Entrance Examination Board, 1985. (See Attachment I.)*

3/ *Indiana Commission for Higher Education, Annual Report (Draft), Indianapolis, IN., March 1986.*

High school academic programs pursued by Minority students tend to differ in type and content from those pursued by Whites.[2,4/] These differences in educational substance import critical implications for educational achievement (e.g., necessitating remedial and compensatory education) and for later educational and career options.

- Blacks are disproportionately more likely to be enrolled in special education programs for the gifted and talented than are whites. However, these proportions vary widely across school districts, suggesting that administrative policies and practices affect placement as much as do student characteristics.

- At the high school level, blacks are underrepresented in academic programs and are overrepresented in vocational education programs where they receive less educational preparation in areas like English, mathematics, and science, and they lose ground in terms of educational achievement.

- Furthermore, black students in vocational education programs are enrolled earlier and more extensively in programs training specially for low-status occupations than are white students. Typically, these assignments are made by school personnel rather than by election of students or their parents.

- Among college-bound seniors in 1981, most blacks had taken fewer years of coursework in mathematics, physical sciences, and social studies than their white counterparts. Even where years of coursework are similar, the content of courses varies for black and white students. For example, black seniors in 1980 were as likely as whites to have taken at least three years of math, but they were much less likely to have taken algebra, geometry, trigonometry, or calculus. Thus, their years of coursework must have been concentrated in areas like general math or business math.

- Students in low-income and predominately minority schools have less access to microcomputers and to teachers trained in the uses of computers. Furthermore, students in predominately minority schools or classrooms are much more likely to use computers for drill-and-practice rather than programming or concept development than students in other schools.

Overall, the evidence suggests that black students are exposed to less challenging educational program offerings which are less likely to enhance the development of higher order cognitive skills and abilities than are white students.[2/] (pp.7-8)

(3) Plans to Request Special Help in College.

Students taking the SAT are asked if they plan to request special help in certain types of skills and counseling. The responses generally reflect many of the strengths and deficiencies noted in their tested proficiencies while in lower grades. There are considerable differences between Whites and Minorities. For example, in Indiana 18 percent of the Whites plan to request special help in mathematics, while 34.4 percent of the Blacks expect to do so. See Table 19 for more comparisons.

[4/] *Southern Regional Education Board, The Enrollment of Black Students in Higher Education: Can Declines Be Prevented? Atlanta: 1340 Spring Street N.W., 30309. (Reported by Scott Jaschik, "Deline in Enrollment of Blacks Seen Unless States Start New Programs." The Chronicle of Higher Education, Jan. 8, 1986.)*

TABLE 19

SELF-REPORTED PLANS TO REQUEST SPECIAL HELP OF HIGH SCHOOL SENIORS COMPLETING THE "STUDENT DESCRIPTIVE QUESTIONNAIRE" OF THE COLLEGE BOARD'S ADMISSIONS TESTING PROGRAM FOR THE UNITED STATES AND INDIANA: 1985

Plans to Request Special Help	Geo. Area	All Students	White	All Minority				
				Total	Black	Hispanic	American Indian	Oriental American
Eduational counseling	U.S.	33.9%	35.3%	29.5%	30.5%	40.4%	34.0%	41.0%
	IN	34.2	35.2	27.4	29.7	35.1	32.8	39.3
Vocational/career counseling	U.S.	24.9%	25.7%	22.4%	24.1%	28.1%	23.5%	31.8%
	IN	24.4	25.0	20.3	23.7	27.9	23.1	24.9
Mathematical skills	U.S.	17.7%	16.5%	21.4%	30.2%	26.2%	22.3%	19.5%
	IN	18.9	18.0	25.0	34.4	27.3	20.9	24.6
Reading skills	U.S.	9.4%	8.8%	11.3%	11.5%	13.9%	10.1%	19.2%
	IN	8.6	8.3	10.6	12.7	15.4	12.7	21.4
Writing skills	U.S.	14.8%	13.9%	17.6%	19.2%	21.4%	17.1%	27.9%
	IN	12.8	12.5	14.8	17.4	19.7	17.9	25.8
Study skills	U.S.	23.6%	23.4%	24.2%	32.8%	29.4%	28.0%	24.1%
	IN	25.5	25.1	28.2	36.4	33.1	32.1	30.2

SOURCES: College-Bound Seniors, 1985: National and Indiana Reports, College Board, Admissions Testing Program, 1985.

In general, proportionately more Indiana students than U.S. students reported needs in mathematical skills and study skills, but U.S. students were more in need of help in reading skills and writing skills.

In Indiana, proportionately more White than Minority students reported needs in educational and vocational/career counseling.

The greater detailed differences in Indiana's students included:

(1) The relatively high proportions of Blacks and Hispanics needing help in math and study skills,
(2) The need for reading skills help by Oriental Americans and Hispanics,
(3) The need for writing skills help by Oriental Americans in particular, as well as by Hispanics and Blacks.

NOTE: Approximately 80% of all students who took the SAT reported they plan to request help in one or more of the areas listed.

4. SOCIO-ECONOMIC TRENDS

A. Illegitimate Births

(1) General Background: The Situation

> ...every day in America, 40 teen-age girls give birth to their THIRD child. To be the third child of a child is to be very much "at risk" in terms of one's future.[1] (p.3)

A recent, special CBS report, "The Vanishing Family — Crisis in Black America," confronted

> a problem only recently readmitted to public debate after 20 years of obfuscation and taboo.... Listening to the bewildered young women who are "married to welfare" in order to support their children, and the aimless young men whose idea of fatherhood ends with the sex act, Mr. [Bill] Moyers was refreshingly judgmental, coming out frequently with such comments as: "Do you every think that maybe you shouldn't do it unless you can be sure you don't have a kid?"...
>
> It's impressive to see Mr. Moyers take up this topic again, considering that he was witness to the last failed attempt to put the problem on the national agenda. What he did, back in 1965 when he was press secretary to President Lyndon Johnson, was publicize a report by then Assistant Secretary of Labor Daniel Patrick Moynihan, which warned that family dissolution among poor blacks might cancel out the progress made by the civil-rights movement.
>
> ... The Moynihan Report attracted so much furious denunciation over the following few years, it became impossible to express concern about the skyrocketing rates of black illegitimacy (currently 58%), and of teen-age pregnancy among black Americans (the highest in the developed world), without being called a racist.[2] (p.22)

However, as one teenage mother told Mr. Moyers, "I'm sick and tired of just laying back waiting for a welfare check. I say, 'This is not how I want to live the rest of my life. This is not the way I planned for my future to be.'"[2] (p.22)

According to Rep. Harold Ford, chairman of a House subcommittee on public assistance, "Half of all Black teenage girls become pregnant. The fastest growing black family formation today is that headed by single teenager mothers."[3] (p.7)

In 1960, 15 percent of total births to teenagers 15 to 19 years of age were children of unwed mothers; by 1983, the incidence had increased to 54 percent.[4] [It should be noted, however, that "illegitimacy" is typically defined according to

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1/ Harold L. Hodgkinson, *All One System: Demographics of Education, Kindergarten through Graduate School.* Washington, D.C.: Institute for Educational Leadership, Inc., 1985.

2/ CBS Reports, "The Vanishing Family -- Crisis in Black America" aired 25 Jan. 1986. Reported by Martha Bayles, "Sex and the Single Teen," The Wall Street Journal, Mon. 27 Jan. 1986, p.22.

3/ UPI Release, "House Cites Problems of Single Parenthood, Poverty among Blacks." The Purdue Exponent, Wed. Feb. 19, 1986, p.7.

4/ AP Release, "Teen Pregnancy: Report Says Growing Problem Breeds Poverty, Dependence on Government." Journal & Courier, Mon. Feb. 10, 1986, p.1.

the time of birth, not conception, and that 1960's society almost required a pregnant female to get married, whereas, in today's society, marriage is typically viewed as unnecessary. Thus, a large part of the increase in illegitimacy may be artificial.]

> Experts who testified before the U.S. House said there is a "values crisis" in America, noting it is now socially acceptable to have children out of wedlock, not only for poor black families but for society's cultural heros.
>
> Marian Edelman, head of the Children's Defense Fund, told the subcommittee it is time to change that moral tone.
>
> "If we cannot have our leaders acting more morally, what do we have," she asked, noting the number of pop stars and actresses who have had children without marrying.[1] (p.7)

> Joyce Ladner, chairman of a panel on Teenage Pregnancy Prevention in the nation's capital, said it is time to "bring young men into the picture." For too long, she said, the social work network has ignored the young men who father children out of wedlock. "Is the United States willing to support a permanent group of people who will never have effective participation in the labor force?" she asked.[1] (p.7)

> A new study by the nonprofit Center for Population Options said Tuesday that teenage pregnancies cost the American taxpayer at least $16.6 billion in 1985 -- nearly double the cost 10 years ago.[1] (p.7)

> Teen-age girls who have children are more likely than their peers to drop out of school and become dependent on government assistance.... And families headed by young mothers are seven times more likely to live in poverty.
>
> Although the nation spends billions of dollars a year on teen-age mothers and their children, there is no focused approach to solving the problems of teen pregnancy at any level of government....
>
> Chairman George Miller said more attention should be paid to preventing teen-age girls from becoming pregnant: "We're spending billions, but we're spending money to pick up the pieces. It's all to deal with the results of a tragic situation."[1] (p.1)

(2) Fertility Rates for Women Never Married: U.S. and IN

The United States fertility rate (number of children per woman) in 1980 for all women 15 through 24 years of age who were never married was 96; that is, every 1,000 women had 96 illegitimate children. The rate was 400 for unmarried women 25 through 44 years old. Therefore, there were 168 illegitimate children for every 1,000 never-married women between the ages of 15 through 44.

The total fertility rate for never-married women in Indiana 15-44 years of age was slightly lower than the National rate. The fertility rates in Indiana were higher for never-married White women and much higher for never-married Black women. Women in all the other minority groups in Indiana had much lower rates than the National rates. These sharp difference in rates are shown in Table 20 on the next page.

TABLE 20

ILLEGITIMATE-BIRTH RATES IN THE UNITED STATES AND INDIANA: 1980
(CHILDREN AS PERCENT OF WOMEN)

Women never married		Fertility Rates					
					Minorities		
		Total	White	Black	Hispanic 1/	Nat. Amer.	Asian
15-24 yrs. old	U.S.	.096	.037	.371	.178	.204	.036
	IN.	.087	.045	.424	.124	.140	.015
25-44 yrs. old	U.S.	.447	.137	1.385	1.009	.898	.104
	IN.	.400	.149	1.487	.521	.573	.013
TOTAL (15-44 yrs.)	U.S.	.168*	.056	.641	.353	.331	.055
	IN.	.136	.060	.677	.167	.243	.014

1/ *Estimated as Total Whites - Blacks - Native Americans - Asian/Pac. Islanders - Non-Spanish Not Elsewhere Classified, i.e., Spanish people who do not identify themselves as any of the aforementioned races.*

**Represents 168 illegitimate children per thousand women, never married, 15-44 years of age.*

SOURCE: 1980 U.S. Census Reports.

(3) Numbers of Illegitimate Births in Indiana

The numbers and rates of illegitimate births in Indiana are very significant and continue to grow. Total illegitimate births in Indiana have grown from 8,713 in 1970 to nearly 15,000 in 1984; 9,329 were White and 5,669 were Non-White. More than 13 percent of all White births were illegitimate in 1984, and more than 63 percent of all Black births were illegitimate, both increases from 1970 (see Table 21).

TABLE 21

ILLEGITIMATE BIRTHS BY RACE, INDIANA: 1970-1984
(ALL WOMEN 15 THRU 44 YEARS OF AGE)

	Illegitimate Births						
			Non-White		Rate 1/		
	TOTAL	White	Number	% of Total	Total	White	Non-White
1970	8,713	5,301	3,412	39.16%	8.77%	5.88%	36.83%
1974	9,458	5,073	4,385	46.36	11.36	6.84	48.43
1979	12,922	7,474	5,448	42.16	14.84	9.67	55.46
1984	14,998	9,329	5,669	37.80	18.77	13.15	63.33

1/ *Percent of live births.*
SOURCE: Indiana Births 1979-1981. Indiana State Board of Health, 1984. Augmented by 1983 & 1984 data from Indiana State Board of Health, Oct. 1985.

The total illegitimate-birth rate in Indiana more than doubled between 1970 and 1984 (from 8.8% to 18.8% of all births). The total numbers of illegitimate births in Indiana increased steadily, from about 8,700 in 1970 to nearly 15,000 in 1984. In 1984, of the State's total female population, approximately 89 percent were White and 11 percent were Non-White; however, the proportions of illegitimate births were 62.2 percent White and 37.8 percent Non-White.

However, the illegitimate-birth rate for Whites increased more than 100 percent between 1970 to 1984 (from 5.9% to 13.2%) whereas the Non-White illegitimate-birth rate increased about 75 percent during that same period (from 36.8% to 63.3%). So, although the illegitimate-birth rate for Blacks is now nearly five times greater than for Whites, the gap has been narrowing.

There was a total of 244,550 births in Indiana during the three year period of 1982-84; 44,163 of these births were illegitimate (about 18.1%). The illegitimacy rate of Non-Whites (primarily Blacks) was almost five times that of Whites, although the number of Non-White births was less than the number of illegitimate White births (see Table 22).

TABLE 22

ILLEGITIMATE BIRTHS BY RACE FOR INDIANA AND SELECTED COUNTIES FOR THREE-YEAR PERIOD, 1982-1984*

Geographic Area	Number of Illegitimate Births			Percent Non-White Of Total	Illegitimacy Rate (Percent of Live Births)		
	Total	White	Non-White		Total	White	Non-White
Indiana	44,163	27,219	16,944	38.37%	18.06%	12.53%	61.90%
Marion County	11,214	4,594	6,620	59.03	28.16	15.57	64.15
Lake	7,522	2,443	5,079	67.52	30.68	14.66	64.66
Allen	2,803	1,495	1,308	46.66	19.93	12.39	65.70
St. Joseph	2,271	1,175	1,096	48.26	21.56	13.25	65.63
Total Selected Co.'s	23,810	9,707	14,103	59.23%	26.77%	14.47%	64.59%

*NOTE: Of the 244,550 births during the three years 1982-1984, 44,163 (18.1%) were illegitimate.

SOURCE: Indiana State Board of Health, October 1985.

More than half of all illegitimate births in Indiana occurred in the four counties listed in Table 22, as were more than 80 percent of all Non-White births. The illegitimacy rate was also much higher in these four counties, especially for Non-Whites. The number and rate of illegitimacy increased from the previous period 1979-81 for both Whites and Non-Whites, indicating this problem is getting worse over time.

For the two counties with almost two-thirds of Indiana Minorities (Marion and Lake Counties, 20-25% of total population in each being Minority), more than half (59-68%) of each county's illegitimate births were to Non-Whites.

B. Household and Family Characteristics

The number of U.S. households increased 7.0 percent between 1980 and 1984 (to approximately 86.1 million), compared with a 4.2 percent increase in total population (to approximately 236.3 million). In Indiana, however, the number of households increase 3.3 percent to two million, while the population grew very slightly (0.1%) to just over five million.

One of the fastest growing segments of the U.S. household and family structure is the presence of unwed teenage mothers and their often multiple number of children, which forms a subfamily within the larger family unit. While such subfamilies constitute a marked financial strain on the larger family and its income earners, other important considerations also exist. For example,

> teen-age mothers tend to give birth to children who are premature, due mostly to a lack of physical examinations and to their very poor diet while pregnant. Prematurity leads to low birth weight, which increases these infants' chances of major health problems due to the lack of development of the child's immune system. Low birth weight is a good predictor of major learning difficulties when the child gets to school. This means that about 700,000 babies of the annual cohort of around 3.3 million births are almost assured of being either educationally retarded or "difficult to teach." This group is entering the educational continuum in rapidly increasing numbers.[1] (p.5)

Robert Zajonc, a University of Michigan researcher, has studied how family demographics influence academic performance and has found a negative statistical association between family size and test scores.[2] The smaller a student's family, the higher his or her SAT scores tend to be. This finding is especially noteworthy for students of Black and Hispanic families which tend to be larger than those of White students. Such students tend to achieve much lower SAT scores than do White students.

There is extensive variation, however, among ethnic groups in household structure and composition. For example, the 1980 U.S. census found that almost half of the Black households were headed by a female, compared with one-fourth the White households and one-fifth the Asian-American households. In Indiana, proportions were similar but the proportion of all Indiana households which were headed by a female was slightly more than two percent less than the proportion of U.S. households.

The structure of Black households, in particular, has changed markedly since 1970, partly as a result of dramatically increased divorce rates and partly due to increases in the numbers of never-married mothers.[3] Between 1970 and 1982, female-

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1/ Harold L. Hodgkinson, All One System: Demographics of Education, Kindergarten through Graduate School. Washington, D.C.: Institute for Educational Leadership, Inc., 1985.

2/ College Press Service release, "Study: Family Size Helps Determine Student's SATs." The Purdue Exponent, Friday, Feb. 21, 1986, p.1.

3/ The College Board, Equality and Excellence: The Educational Status of Black Americans. New York: The College Entrance Examination Board, 1985. (See Attachment I.)

headed households increased from 28 percent to 41 percent of all Black households.

The number of persons per household also varies considerably across ethnic groups. Hispanics tend to have the largest families and Whites, the smallest. And the pattern for Indiana parallels the national pattern.

Most Black children do not live in two-parent households. In 1982, only 43 percent lived with two parents,[3] a two percent decrease in two years. This proportion was the same for Indiana's Black children, while 83 percent of White children lived with two parents. Moreover, in 1982 almost half (48%) of all U.S. Black children 18 years of age or younger lived in households below the poverty line, compared to one of six White children.[3]

Finally, in households headed by a female, unemployment rates are much higher for Blacks and Hispanics than for Whites. This is especially problematic because of larger Black and Hispanic households depending upon the mother's income (or welfare). Furthermore, while more than two-thirds of children living in female-headed households received government assistance targeted for the poor in the fourth quarter of 1984, the percentage was even higher (85%) for Black and Hispanic female-headed households.[4]

> The education system is losing young people. The baby boom has gone "bust," and America "will simply not be a nation of youth in our lifetime." One obvious conclusion, says Mr. Hodgkinson, is that colleges and universities will have to attract, retain, and succeed in educating more and more older students, or the institutions may not long survive.
>
> Widespread poverty, teen-age pregnancy, single-parent families, and other symptoms of social decay are virtually guaranteeing a rapid rise in the number of children with serious physical and educational disabilities. Inevitably, most of those children will enter and move through the schools, from kindergarten to high schools and beyond. That means that the battle for "remediation," already a *cause celebre* in higher education, really ought to begin a lot sooner than in college, Mr. Hodgkinson maintains -- and college and university leaders ought to be right in the thick of it by working with the schools on their curricula.
>
> Racial minorities are reproducing much faster than the white population, a fact of life that means that schools and colleges will be made up increasingly of the kinds of student with whom most present-day educators have had relatively little experience.
>
> Aren't such observations already part of the "conventional wisdom"? Haven't academic leaders, researchers, and other observers of education been talking about such trends for years? And aren't most officials struggling to get out in front of them?
>
> Mr. Hodgkinson thinks not -- not adequately, at any rate. And the problems are potentially so grave and so unlike those of the past, he says, that many educational and political leaders have been afraid to acknowledge them, much less confront them.[5] (pp.1,28)

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[4] Staff Reporter, "Many U.S. Children Live in Families Receiving Aid." The Wall Street Journal, Friday, Jan. 31, 1986, p.3.

[5] Robert L. Jacobson, "Consultant's Delight: Making Educators and Politicians Confront the Bad News." The Chronicle of Higher Education, March 19, 1986, pp. 1,28,29. (Speaking of Harold L. Hodgkinson)

TABLE 23

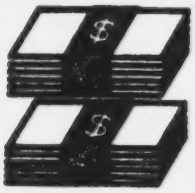
FAMILY/HOUSEHOLD CHARACTERISTICS IN THE UNITED STATES AND INDIANA BY ETHNIC GROUP: 1980

Family/Household Characteristic:	Total		White		Minority							
					Total[1]		Black		Hispanic[2]		Asian & Pac.Isl.	
	U.S.	IN	U.S.	IN	U.S.	IN	U.S.	IN	U.S.	IN	U.S.	IN
Number Households (Th)	80,467.4	1,928.4	68,991.3	1,778.2	11,476.1	150.2	8,413.2	131.6	1,482.6	8.3	1,062.9	6.3
Number Female Heads (Th)	22,302.4	489.0	17,783.2	428.3	4,519.2	60.7	3,728.7	56.6	406.9	1.9	224.4	1.2
Percent	27.7%	25.4%	25.8%	24.1%	39.4%	40.4%	44.3%	43.0%	27.4%	22.3%	21.1%	18.5%
# Persons/Household	2.74	2.77	2.68	2.74	3.17	3.13	3.05	3.06	3.45	3.42	3.22	3.05
# Persons/Family	3.27	3.26	3.19	3.22	3.74	3.74	3.69	3.67	3.87	3.87	3.75	3.67
%Households w. >4 Persons	13.4%	13.4%	11.9%	12.7%	22.2%	20.8%	20.8%	20.4%	30.8%	29.1%	22.5%	20.5%
#Persons under 18 yrs. (Th)	63,792.3	1,619.0	50,399.6	1,441.2	13,392.7	177.8	9,406.9	153.2	2,171.4	12.2	1,125.0	8.0
%Living w. 2 Parents	76.7%	79.8	82.9%	83.5%	53.4%	49.8%	45.4%	45.3%	68.3%	73.4%	84.7%	87.6%
Labor Force Status, Female Householder w. No Husband Present:												
Number Women (Th)	8,205.3	175.1	5,488.6	137.3	2,716.6	37.8	2,272.1	35.7	279.0	1.1	88.2	.5
Number Unemployed (Th)	395.1	12.8	209.2	8.2	185.9	4.5	161.6	4.3	15.8	.1	3.1	.02
Percent	4.8%	7.3%	3.8%	6.0%	6.8%	12.0%	7.1%	12.1%	5.7%	12.3%	3.5%	4.4%
%Families w. 0 Workers	22.5%	16.5%	19.2%	14.8%	29.1%	22.6%	28.5%	22.3%	38.4%	33.2%	16.9%	17.4%
1 Worker	48.1	53.1	49.3	53.7	45.6	50.9	46.5	51.1	38.9	47.6	43.4	41.5
≥2 Workers	29.4	30.5	31.5	31.5	25.3	26.5	25.0	26.6	12.6	19.2	39.6	41.1
#Married-Cpl. Families (Th)	48,990.3	1,246.4	43,641.5	1,178.9	5,348.8	67.4	3,486.6	55.6	926.1	5.8	690.8	4.0
#w. Neither Spouse in Labor Force or Employed	8,152.8	189.2	7,346.5	67.4	806.4	10.2	575.1	8.8	117.1	.7	68.6	.4
Percent	16.6%	15.2%	16.8%	15.2%	15.1%	15.1%	16.5%	15.7%	12.6%	11.6%	9.9%	10.6%

1/ Estimated as all non-Whites.
2/ Estimated as Total-Whites-Blacks-Native Americans-Asian/Pac.Islanders-Non-Spanish "Not Elsewhere Classified", i.e., Spanish people who do not identify themselves as any of the aforementioned races.

SOURCE: 1980 U.S. Census reports.

C. Income Level



(1) General Background

One socio-economic characteristic with the greatest ethnic-group differences is income level. Black families earned 55 percent of the income earned by White families in 1960.[1/] In 1969 this percentage was 63 percent, but by 1982 it had declined back to 55 percent.[2/] Moreover, although Black married-couple families made income gains between 1971 and 1981, these families declined in proportion of all Black families.[1/] The percentage of Black two-income families has also been declining.[3/]

Since 1970, approximately one in three Blacks has lived with an income below the poverty level.[1,2/] However, from 1983 to 1984, the percentage declined slightly from 36 percent to 34 percent.[4/]

Another ethnic group with median income well below that of Whites is the rapidly expanding Hispanic population. Although the percentage of all U.S. people living below poverty level decreased five percent during 1984 (including Blacks), the percentage of Hispanics actually increased slightly, bucking the trend.[4/]

The low median income levels of Blacks and Hispanics results from their concentration in occupations with low skill levels. "Education is the single most important human capital characteristic in terms of its direct correlation on future earnings.[5/] (p.2) Ignoring field(s) of study, Blacks and Hispanics have lower returns to education than Whites. While White men have earned 6.1 percent more for each additional year of school completed, the increase has been only 5.4 percent for Mexican American men, 3.5 percent for Cuban and Puerto Rican men, and 4.9 percent for Black men. However, besides educational level and occupational field and level, income differences are also attributable to such characteristics as language fluency, time in the U.S., work experience, age, military experience, health and government employment.[5/]

The percentage of people who are poor vary considerably across ethnic groups. (Any family of four earning less than $10,609 in 1984 was considered poor.) In the USA in 1984, 11.5 percent of Whites were below poverty level, as were 33.8 percent of Blacks and 28.4 percent of Hispanics. In Indiana the highest median incomes were earned by Whites, and the lowest were earned by Native Americans, Blacks and Hispanics, which is quite similar to the National scene.

1/ The College Board, Equality and Excellence: The Educational Status of Black Americans. New York: The College Entrance Examination Board, 1985. (See Attachment I.)

2/ Mireille G. Gates, "Experts: 80's Recession Kept Unrest in Check." Journal & Courier, Sun., Aug. 18, 1985.

3/ Harold L. Hodgkinson, All One System: Demographics of Education, Kindergarten thru Graduate School. Washington, D.C.: Institute for Educational Leadership, Inc., 1985.

4/ Jack Kelley, "USA Gains in Poverty Fight." USA Today, Wed., Aug. 28, 1985.

5/ National Council of LaRaza, Hispanics in the Labor Market: 1980-1985. Washington, D.C.: LaRaza, Dec. 1985. (See Attachment II.)

TABLE 24

INCOME CHARACTERISTICS IN 1979 BY ETHNIC GROUP FOR THE UNITED STATES AND INDIANA

	TOTAL		WHITE		MINORITY					
					TOTAL 1/		BLACK		HISPANIC 2/	
Income Level:	U.S.	IN.	U.S.	IN.	U.S.	IN.	U.S.	IN.	U.S.	IN.
Number of Families (Th)	59,190.1	1,461.64	50,644.9	1,350.32	8,545.3	111.33	6,105.7	96.78	1,232.6	6.98
Median Income	$19,917	$20,535	$20,835	$20,805	$14,446	$16,748	$12,598	$15,964	$12,887	$18,583
Percent < $10,000	20.4%	17.3%	17.6%	16.1%	37.0%	31.9%	40.3%	33.0%	33.8%	23.7%
Number of Households (Th)	80,467.4	1,928.37	68,991.3	1,778.16	11,476.1	150.21	8,413.2	131.62	1,482.6	8.31
Median Income	$16,841	$17,582	$17,680	$17,860	$12,434	$14,632	$10,943	$13,589	$11,584	$18,062
Percent < $10,000	29.1%	26.5%	26.8%	25.6%	42.9%	37.2%	46.5%	39.1%	36.4%	10.5%
Household per Capita Income	$7,412	$7,269	$7,929	$7,451	$4,761	$5,362	$4,610	$5,330	$4,641	$5,701
Number Married-Cpl. Fam. (Th)	48,990.3	1,246.36	43,641.5	1,178.94	5,348.8	67.42	3,486.6	55.58	926.1	5.84
Median Income	$21,635	$21,942	$22,042	$21,949	$18,302	$21,820	$17,499	$22,001	$17,189	$20,366
# Female H'Hold w/o Husb. (Th)	8,205.3	175.11	5,488.6	137.26	2,716.6	37.85	2,272.1	35.74	185.1	1.15
Median Income	$9,960	$10,417	$11,384	$10,979	$7,058	$8,379	$7,271	$8,100	$6,937	($7,025)
Income Below 125% Poverty Level:										
Number of Families (Th)	7,918.98	153.28	5,213.02	124.61	2,705.96	28.68	2,062.73	25.70	409.17	1.45
Percent all Families	13.4%	10.5%	10.3%	9.2%	31.7%	25.8%	33.8%	26.6%	33.2%	20.7%
Persons per Family	3.59	3.52	3.37	3.44	4.01	3.87	3.94	3.86	4.30	3.98
Number Families with Public Assistance Income (Th)	2,273.97	35.45	1,142.58	22.71	1,131.39	12.75	914.99	11.95	148.22	.46
Percent all Families	3.8%	2.4%	2.3%	1.7%	13.2%	11.4%	15.0%	12.3%	12.0%	6.5%
Number Female Householders w/out Husbands (Th)	3,101.39	59.81	1,598.03	40.64	1,503.36	19.17	1,258.52	18.05	169.13	.64
Percent all Families	5.2%	4.1%	3.2%	3.0%	17.6%	17.2%	20.6%	18.7%	13.7%	9.2%
Number working in 1979	1,411.47	34.35	795.19	24.86	616.28	9.50	529.13	9.00	52.56	.22
% Female Householders	45.5%	57.4%	49.8%	61.2%	41.0%	49.5	42.0%	49.9%	31.1%	33.6%

1/ Estimated as all Nonwhites, numbers in parentheses are estimated as total of all Nonwhite groups using "Spanish Origin" in place of "Hispanic".
2/ Estimated as Total - Whites - Blacks - Native Americans - Asian/Pac. Islanders - Non-Spanish "Not Elsewhere Classified" i.e., Spanish people who do not identify themselves as any of the aforementioned races; numbers in parentheses are "Spanish Origin" (of any race designated), usually two to three times larger than "Hispanic".

SOURCE: 1980 U.S. Census Reports.

(2) Median Parental Income for Students Who Took the SATs in 1985 $

The median parental income of Whites was significantly higher than that of Minorities for the U.S. ($34,700 vs. $24,410). The difference is also significant for Indiana ($30,800 for Whites and $23,473 for minorities). The median parental income is especially low for Blacks; 30-34 percent of Blacks have income less than $12,000, compared to less than 10 percent of Whites. Although the Indiana median parental income is lower than that for the U.S., the income of Blacks and Hispanics is higher in Indiana than in U.S. as a whole.

The estimated parental contribution to education of Whites is significantly higher than that of Minorities in both the U.S. & Indiana; the difference for Indiana is not as great as for U.S. Parental contributions to education are especially low for Blacks (almost nonexistent); they are also low for Hispanics. The ratio of estimated contributions to income is significantly lower for Blacks and Hispanics than for Whites.

Nearly 38 percent of all U.S. students taking the SAT reported they planned to request special help to get part-time work; 41.4 percent of Indiana students planned to do so. A higher proportion of all Minority groups than Whites, except for the Oriental Americans, planned to request part-time work; the highest group was Blacks (55.4% of Indiana Black students).

TABLE 25

SELF-REPORTED SOCIOECONOMIC CHARACTERISTICS OF HIGH SCHOOL SENIORS COMPLETING THE "STUDENT DESCRIPTIVE QUESTIONNAIRE" OF THE COLLEGE BOARD'S ADMISSIONS TESTING PROGRAM, FOR THE UNITED STATES, AND INDIANA: 1985

	Geo. Area	All Students	White	All Minority				
				Total*	Black	Hispanic	American Indian	Oriental American
Ethnic representation of respondents	U.S.	100.0%	75.7%	24.3%	8.4%	3.2%	.5%	4.5%
	IN	100.0	87.2	12.8	5.8	1.3	.4	1.0
Median parental income	U.S.	$32,200	$34,700	$24,410	$17,100	$19,378	$24,700	$26,400
	IN	30,000	30,800	23,473	18,200	25,107	24,800	27,600
Percent with parental income ≥ $30,000	U.S.	54.6%	60.4%	36.5%	23.3%	28.8%	40.1%	44.4%
	IN	50.1	52.3	32.2	24.5	34.0	35.8	46.8
Percent with parental income < $12,000	U.S.	11.5%	7.2%	24.9%	33.9%	28.3%	21.4%	20.6%
	IN	10.6	9.1	22.8	30.8	15.6	17.5	19.9
Median parental contribution	U.S.	$2,020	$2,590	$244	$0	$166	$1,050	1,020
	IN	1,590	1,820	590	170	620	960	1,280
Ratio of median parental contribution to income	U.S.	6.3%	7.5%	1.0%	0.0%	0.9%	5.3%	3.9%
	IN	5.3	5.9	2.5	0.9	2.5	3.9	4.6
Percent planning to request part-time work	U.S.	37.9%	38.0%	37.6%	50.4%	44.0%	42.4%	39.3%
	IN	41.4	41.4	41.4	55.4	53.7	46.3	34.6

SOURCES: College-Bound Seniors, 1985: National, Midwestern, and Indiana Reports, College Board, Admissions Testing Program, 1985.

**Estimated (also includes "Other" and "Not Reported"); U.S. - United States IN - Indiana*

D. Higher Education Financial Aid Needs

(1) General Situation

> In brief, the financial situation faced by blacks, either young people or adults, considering college attendance has become harsher in the 1980's. Not only has family income failed to keep pace with that of Whites and Hispanics, but the substantial increase in single head of family households (with, therefore, a single wage earner at best) makes it most difficult to accumulate even modest savings for college or to consider realistically paying-off monies borrowed to attend college. This disparity in income, combined with the shifting composition of the financial aid package may be the primary deterrent to black college enrollment.... [Moreover,] increase in loans to over 50% of the aid package and a reduction of grants from two-thirds to under half of the loan package would undoubtedly prove very discouraging to minority and black young people, particularly as they look to a four-year college education. A debt load of up to $10,000 at the conclusion of a four-year degree program can prove a very strong deterrent to a lower income person whose annual family income is half that amount.
>
> ...[Therefore,] colleges appear to offer a debt burden and only modest assurances of well paid employment after graduation. This would appear to place colleges at a disadvantage in recruiting those young people who are uncertain as to their academic ability and insecure as to their financial future.[1] (pp.12-14,16)

According to a recent report by the American Association of State Colleges and Universities,[2] student financial aid has not kept pace with increases in the total costs of attending public colleges and universities between school years 1981-82 and 1983-84. While total costs increased an average of $300, aid to the neediest students increased only $150, and the number of recipients fell 2.3 percent. Nevertheless, student aid did continue to be directed to the neediest students, with the proportion of recipients meeting the most stringent aid criteria increasing and the percentage of all aid dollars going to the needy students. However, the overall recipient decline reflects a much larger 12.4 percent decline for Minority students. Minority students thus represented 29 percent of all recipients in 1983-84, compared with 32 percent in 1981-82.

More recently, the National Association of State Scholarship and Grant Programs has found that state spending on grants and scholarships for needy undergraduates was expected to increase nearly 12 percent for academic year 1985-86 from 1984-85.[3] However, 14 states were expecting no increase, while only 22 states expected an increase of 10 percent or more. Moreover, grant aid has kept pace with total costs in only 15 states since 1979-80. As "a reflection of the dramatic and recent decrease in post-secondary-education participation rates of Black high-school graduates throughout the nation"[3] (p.18), less aid was again expected to go to Black students than previously, while more was

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1/ *The College Board, Minority Enrollment in Higher Education Institutions: A Chronological View (Final Draft). New York: The College Entrance Examination Board. Sept. 9, 1985.*

2/ *Jean Evangelauf, "Student Aid Fails to Keep Up with Costs on Public Campuses, New Study Finds." The Chronicle of Higher Education, June 5, 1985, pp. 17,19.*

3/ *Robin Wilson, "State Funds for Needy Undergraduates to Rise 12 Pct. This Year, Survey Finds." The Chronicle of Higher Education, Feb. 5, 1986, pp. 13,18.*

expected to go to Asian-American students. Black students' share of state scholarship aid was expected to decrease to 15 percent of the total from 24 percent in 1981-82. Thus, in general, there has been a shift in student aid toward middle-class White students.[4] Finally, an increased share of state grant aid was expected to go to part-time students, older students, and students attending proprietary institutions.[3]

While less needy students have first relied upon loans, and then personal resources and work, to pay for college, the neediest students have first relied upon grants, followed by loans, personal resources and work.[2] This reliance is especially critical in light of a finding by the Education Department's General Accounting Office that 6.9 percent of Pell Grants awarded in 1982-83 were underpayments to qualified students.[5] This was an increase from the 5.7 percent in 1980-81. It is no wonder that the Southern Regional Education Board has concluded that "the high cost of higher educaton has hurt efforts to boost Black enrollment"[6] (p.18) and has blamed Black students' better job prospects and inability to obtain financial aid for making the college-attendance rate decline.[7]

Finally, as noted earlier in this report, financial aid has a major impact not only on college enrollment, but also on college retention, especially among Black students,[7,8]

> who are nearly twice as likely to stay in 4-year colleges with aid than without. The importance of financial aid for black students is apparent, considering that in 1981, 48 percent of black college-bound seniors came from families with incomes under $12,000, as compared to only 10 percent of their white counterparts.[8] (p.5)

(2) College Student Expenses and Resources: Indiana Residents

Examination of estimated expenses versus possible available resources, reveals that, on average, a student who can earn up to about $1,100 a year from outside sources (no easy task), could attend college from a financial point of view. Unfortunately, the shortfall between expenses and resources is greatest for Blacks (despite Federal Pell Grant Aid, State Assistance, etc.). The gap is due in large part to low parental contributions and the limitations placed upon and inter-relationships of certain resources' availability. Another major shortcoming is an apparent ignoring of disadvantaged students' aversion to loans -- especially relative to their families' total income -- which make up a substantial and increasing portion of their total aid package.

4/ American Council on Education, "Dim Outlook for Minorities in Higher Ed Continues." Higher Education & National Affairs, Vol. 34 (No. 19), Oct. 14, 1985, pp. 1,5 (Newsletter of the ACE)

5/ Robin Wilson, "Nearly 30 Pct. of Pell Grants Are Too Big or Too Small, Government Auditors Find." The Chronicle of Higher Education, July 3, 1985, pp. 15,18.

6/ Scott Jaschik, "Decline in Enrollment of Blacks Seen Unless States Start New Programs." The Chronicle of Higher Education, Jan. 8, 1986.

7/ Exponent Wire Service, "Study: Black Students' College Attendance Drops." The Purdue Exponent, Fri., Jan. 24, 1986, p.1.

8/ The College Board, Equality and Excellence: The Educational Status of Black Americans. New York: The College Entrance Examination Board, 1985. (See Attachment 1.)

TABLE 26

ESTIMATED COLLEGE STUDENT EXPENSES AND RESOURCES OF INDIANA RESIDENTS BY ETHNIC GROUP (MEDIANS): 1986-87 SCHOOL YEAR

	2-Year Public Institutions						4-Year Public Institutions					
	White students		Black Students		Hispanic Students		White Students		Black Students		Hispanic Students	
Estimated Expenses[1]:	Commuter	Resident	Commuter	Resident	Commuter	Resident	Commuter	Resident	Commuter	Resident	Commuter	Resident
Tuition and Fees	$659	$659	$659	$659	$659	$659	$1,242	$1,242	$1,242	$1,242	$1,242	$1,242
Books and Supplies	355	355	355	355	355	355	373	373	373	373	373	373
Student's Room	-	1,180	-	1,180	-	1,180	-	1,237	-	1,237	-	1,237
Student's Board	(590)	1,180	(590)	1,180	(590)	1,180	(618)	1,236	(618)	1,236	(618)	1,236
Personal Expenses (clothing, laundry, medical)	729	729	729	729	729	729	836	836	836	836	836	836
Transportation	704	386	704	386	704	386	704	390	704	390	704	390
Other Expenses (child care, handicap, etc.)	?	?	?	?	?	?	?	?	?	?	?	?
Total Expenses	$3,037	$4,489	$3,037	$4,489	$3,037	$4,489	$3,773	$5,314	$3,773	$5,314	$3,773	$5,314
Resources:												
Est. Parental Contrib.[2]	$1,820	$1,820	$170	$170	$620	$620	$1,820	$1,820	$170	$170	$620	$620
Federal Pell Grant Aid[3]	-	-	1,290	1,750	1,290	1,350	-	-	1,650	1,750	1,350	1,350
State Assistance[3]	-	-	340	340	-	-	-	-	750	750	435	435
Institutionally Determined:[3]												
Gift Aid	-	200	-	-	-	100	-	620	-	-	-	100
Work-Study (approximate)	-	-	-	-	-	-	-	-	-	-	-	300
National Direct Student loan (max)	-	-	-	1,200	-	1,500	-	-	-	1,500	300	1,500
Guaranteed Student Loan (max)[3]	-	1,500	-	-	-	-	1,000	1,700	-	-	-	-
Student Contribution from Assets[4]	224	224	145	145	170	170	224	224	145	145	170	170
Total Resources (except student contribution)	$2,044	$3,744	$1,945	$3,605	$2,080	$3,740	$3,044	$4,364	$2,715	$4,315	$2,875	$4,475
Unmet Need[5]	$993	$745	$1,092	$884	$957	$749	$729	$950	$1,058	$999	$898	$839

1/ College Scholarship Service, CSS Counselor's Source Book for 1986-87. New York: College Entrance Examination Board. 1985.p.47. (National averages but bery similar to Indiana)

2/ College Board, College-Bound Seniors, 1985: Indiana (Table 10). Admissions Testing Program, 1985

3/ Estimated by Office of Financial Aid, Purdue University, Feb. 1986, using 1985-86 Pell Grant Schedule and State awards.

4/ College Scholarship Service, Institutional Summary Data for Academic Year 1985-86: Indiana Higher Education (Table 7). College Board, Sept. 1985,p.9.

5/ To be met by outside gifts, non-work-study employment earnings, etc.

(3) Relationships Between Parental Contribution to Education and SAT Scores for Indiana Students

Average SAT scores are positively related to parental income and contribution. Half of those students with parental contribution $8000 or more also plan to apply for financial aid, compared to 95% of the students with no parental contribution.

TABLE 27

ESTIMATED PARENTAL CONTRIBUTION TOWARD APPLICANTS' EDUCATION BY SAT AVERAGE FOR INDIANA, 1985

Parental Contribution	Percent Planning to Apply for Financial Aid: By Contribution Level	Percent Planning to Apply for Financial Aid: Of All Students	SAT Average: Below 400	SAT Average: 400-499	SAT Average: 500-599	SAT Average: 600 or Over	No SAT	All Students
$0	94.3%	20.3%	26.0%	19.9%	16.3%	12.8%	33.4%	21.5%
$1-499	91.7	8.8	10.9	10.0	7.9	6.2	10.0	9.6
$500-999	89.8	8.0	8.9	9.3	8.6	8.3	8.1	8.9
$1000-1499	88.8	8.3	9.6	9.5	9.1	7.3	8.1	9.3
$1500-1999	85.5	5.6	6.4	6.7	6.8	7.5	5.4	6.6
$2000-2999	83.1	9.0	10.4	11.3	11.1	10.8	8.3	10.8
$3000-3999	74.2	5.3	6.4	7.2	7.8	8.6	6.6	7.1
$4000-5999	71.4	7.5	9.4	10.5	12.2	12.9	8.7	10.5
$6000-7999	60.4	4.0	5.5	6.4	8.2	9.8	4.3	6.6
$8000-Over	50.3	4.6	6.5	9.2	11.8	15.9	7.0	9.2
TOTAL	80.8%	80.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Number Responses	33,240		9,438	10,796	6,254	1,689	1,664	29,841
% of Total	100.0%		31.6%	36.2%	21.0%	5.7%	5.6%	100.0%
Median Contribution	$1,210		$1,210	$1,592	$2,100	$2,759	$900	$1,590
Median Income	$27,700		$27,460	$30,180	$33,279	$36,087	$24,600	$30,000
Ratio of Median Contrib. to Income	4.4%		4.4%	5.3%	6.3%	7.6%	3.7%	5.3%

SOURCE: College-Bound Seniors, 1985: Indiana Report, College Board, Admissions Testing Program, 1985.

NOTE: Blacks and Hispanics in particular have lower median parental income and contribution, and their SAT scores are well below average.

(See previous table and Section 4C of this report for details on income and parental contribution.)

5. EMPLOYMENT TRENDS

Because of the rapidly increasing representation of Minorities within the population, demographic changes resulting from these increases will continue to have a significant impact on the labor force structure and on employment.

> ...Hispanics [and Blacks] are a youthful subpopulation group with a vast productivity potential. Hispanics are projected to account for at least 8% of the labor force by 1995. Though national demographics will favor lower unemployment over the next 12 years as prime-age workers make up a larger share of the work force, the particular demographic trends of the Hispanic community indicate the opposite, since its high birth rates and lower median age mean that Hispanics will be entering the workforce at a high rate.
>
> One long-range effect of this demographic trend is that the taxable salaries of Hispanic [and Black] workers will be increasingly vital to the fiscal viability of many domestic programs, especially Social Security, which relies on withholding allowances of current workers for the support of current retirees. It is not unrealistic to envision an aged White population being supported by an increasingly non-White workforce. Therefore, changes in public policy, which recognize these demographic realities, are necessary in subpopulation groups....
>
> Responsive policies from the federal [and state] government, policies which recognize the educational crisis faced by Hispanics [and Blacks], are crucial if ...[Minorities] are to become productive workers. Education is inextricably bound to earning levels. Higher education not only raises wage rates, it also lowers the probability and duration of unemployment spells, which ultimately translate to lower earnings.
>
> ...Therefore, to enable Hispanics and other minority groups to make their full contribution in the future -- and to assure a trained work force which can meet the future needs of the U.S. economy -- human investment partnerships must develop between the public, private, and nonprofit sectors. ...[Minorities represent] a human resource, whose reservoirs must be tapped in order to maximize its work force participation and productivity potential. The investment should be made now in order to reap societal benefits and protect the nation's economic security tomorrow.[1/] (p.9)

A. Employment Status

According to the 1980 U.S. census, approximately six of 10 persons aged 16 or older were in the labor force. In recent years this labor force participation rate has been increasing due primarily to increasing numbers and percent of women entering the workplace[1/] The highest national labor force participation rates are associated with Asian-Americans and Hispanics, and the lowest, with Native Americans and Blacks. The higher participation rate for Hispanics has been attributed by some economists to the younger average age of Hispanics because of higher participation rates among younger -- as opposed to older -- adults.[1/] However,

> Hispanics face severe, continuing unemployment and underemployment. During both good and bad economic times, unemployment among Hispanics is usually 60% higher than that of White Americans. ...[And] double-digit unemployment has been a pattern for both the Hispanic and Black communities during the last five years.[1/] (p.8)

1/ *National Council of LaRaza, Hispanics in the Labor Market: 1980-1985. Washington, D.C.: LaRaza, Dec. 1985.* (See Attachment II.)

Unemployment rates for black men and women in virtually all age categories have increased fairly steadily since 1965 [and are much higher than the unemployment rates of White persons]. In 1982-83, about 1 out of every 5 blacks in the labor market were unemployed, with much higher rates for teenagers and young adults.

Unemployment rates and labor force participation rates are strongly correlated with educational attainment for both blacks and whites. However for blacks, marked differences in employability occur only for those with a college degree [who enjoy the more favorable employment rates].[2/]

It should be noted that official unemployment rates do not include either long-term discouraged workers or persons working part-time for economic reasons only.

(1) Unemployment Rates: National

There are very large differences in unemployment rates across ethnic, age and occupational groups as presented in Table 28.

TABLE 28

EMPLOYMENT STATUS OF U.S. LABOR FORCE BY ETHNIC GROUP, SEX AND AGE AND BY OCCUPATIONAL GROUP[1/]: FEB. 1986
(Seasonally Adjusted)

	(Millions of Persons)
Civilian Labor Force	118.8
Civilian employment	117.1
Unemployment	8.5
	(Percent of
Unemployment	Civilian Labor Force)
All civilian workers	7.3%
Adult men	6.2%
Adult women	6.7%
Teenagers (all)	19.0%
White	6.4%
White teenagers	6.9%
Black	14.8%
Black teenagers	39.1%
Spanish origin	12.3%
Occupational Groups (not seasonally adj.):	
Exec., Adm., Mgrl. Workers.....	2.9%
Professional Workers.....	1.9%
Technician & Related Workers....	3.9%
Sales Workers.....	6.1%
Administrative Support Workers..	4.9%
Protective Service Workers.....	5.8%
Other Service Workers.....	9.6%
Precision, Craft, Repair Workers	9.5%
Oper., Fabr., Laborers.....	12.3%
Farm, Forest, Fishing Workers...	12.4%

[1/] *Occupational group employment status numbers and unemployment rates are not seasonally adjusted.*

SOURCE: *Bureau of Labor Statistics* News, *U.S. Dept. of Labor, Washington, D.C., March 7, 1986.*

[2/] *The College Board,* Equality and Excellence: The Educational Status of Black Americans. *New York: The College Entrance Examination Board, 1985. (See Attachment I.)*

The income levels of Black and Hispanic workers were shown earlier to be well below that of White workers. As can be seen in Table 28, the unemployment rates of these minority groups are much higher than for White workers.

(2) Labor Participation Rates: National

Labor participation rates of adults 25-64 years of age are directly related to the number of years of school completed for all ethnic groups. Only about 60 percent of the adults with less than four years of high school were in the labor force, more than 75 percent who had completed high school were in the labor force, and about 82 percent of those with some college and 88 percent with four years or more of college were in the labor force. Significantly, the proportion of Black adults with less than four years of high school is nearly twice as large as it is for White adults (26.2% vs. 14.7%), and the proportion of Hispanic adults with less than four years of high school is nearly three times that of Whites (43.5% vs. 14.7%).

Note there has been a decrease in all groups during this decade in the proportion of labor force with less than four years of high school completed.

TABLE 29

LABOR FORCE AND LABOR FORCE PARTICIPATION RATES FOR PERSONS 25 TO 64 YEARS OLD BY YEARS OF SCHOOL COMPLETED, RACE, AND HISPANIC ORIGIN: MARCH 1975, 1980, AND 1985

Labor Force Status by Years of School Completed (Numbers in thousands)	White			Black			Hispanic origin		
	1975	1980	1985	1975	1980	1985	1975	1980	1985
U.S. Civilian Labor Force:									
Total	60,608	68,509	76,739	6,666	7,729	9,157	2,893	3,760	5,412
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 4 yrs. of high school	25.8	19.1	14.7	46.1	34.7	26.2	54.3	47.5	43.5
High school: 4 yrs. only	40.6	40.2	40.7	33.0	38.1	39.5	26.0	30.0	32.0
College : 1 to 3 yrs	14.6	17.7	19.1	11.9	16.2	19.2	10.9	13.0	13.7
: 4 yrs. or more	19.0	22.9	25.6	9.1	11.0	15.0	8.8	9.5	10.8
Labor Force Participation Rates:									
Total (percent)	70.8	74.2	76.6	69.4	71.5	73.4	66.7	70.5	71.1
Less than 4 yrs. of high school	62.0	61.4	60.7	61.2	58.1	57.1	60.5	63.5	62.6
High school: 4 yrs. only	70.1	73.7	75.8	75.2	79.2	77.2	71.7	75.0	75.9
College : 1 to 3 yrs	75.4	79.2	81.1	81.1	82.1	85.6	78.9	82.3	82.8
: 4 yrs. or more	84.6	86.0	87.7	88.3	90.3	89.9	87.6	84.0	87.0

SOURCE: Bureau of Labor Statistics News (USDL 85-355), Labor Day, 1985.

(3) Labor Force Characteristics

Since the second quarter of 1984, civilian employment (seasonally adjusted) has increased approximately 3.3 percent while unemployment has remained constant to a slight decline. By ethnic group, employment increase has been approximately 11 percent for Hispanics, 8 percent for Blacks, and 3 percent for Whites. Meanwhile, unemployment rates have shown a decrease for all except, perhaps, Hispanics. Changes, however, for Hispanics are tentative because of new and improved procedures for calculating illegal immigration counts.

During this same time period, employment has increase for all major occupational groups, except agricultural ones. The greatest increases have occurred for Protective Service (12%), Managerial (7%), and Administrative Support (6%) occupations. It is noteworthy that occupational unemployment rates* have been and continue to be low for Professional workers (1.9%), Managerial workers (2.9%), and Technician and Related workers (3.6%) (see Table 28). However, unemployment rates are much higher for Operators and Laborers (12.3%), Agricultural workers (11.0%), "Other" Service workers (9.5%), and Precision, Craft and Repair workers (8.9%), the very occupations within which Blacks and Hispanics have been over-represented. These occupations will continue to experience high unemployment because of the changing industrial structure within the U.S., especially with increasing automation.

*Average of Jan. and Feb. 1986

B. Occupational Comparisons

Black and Hispanic workers, compared with White workers, are more concentrated in those occupations which have the highest unemployment rates: e.g. operator, fabricator and laborer occupations, "other" service occupations, and farm laborer occupations. These occupations also tend to be at the lower end of the pay scale:

> Although blacks have made strides since 1970 in gaining access to higher-paying and higher-status jobs, whites were still more than twice as likely as blacks to hold jobs in professional or managerial occupations in 1980. Black participation in these [preferred] occupations was also concentrated in jobs at the lower end of the professional pay scale.[1] (p.4)

> In 1984, Hispanic workers were especially concentrated in the following occupations:
>
> 1. Technical, sales, and administrative support, where 25.8% of Hispanics in the civilian labor force are employed, compared to 30.9% of the total labor force. Over half of Hispanics (60%) employed in this category are concentrated in administrative support, including clerical work.
> 2. Operators, fabricators, and laborers, where 25.0% of Hispanics in the labor force are employed, compared to 16.0% of the total labor force. Over half of Hispanics (55%) employed in this category are machine operators, assemblers,and inspectors; one-fourth (27%) are handlers, equipment cleaners, and helpers.
> 3. Service occupations, where 17.6% of Hispanics in the labor force are employed, compared to 13.5% of the total labor force. Excluding private household and protective sevice occupations, over four-fifths of Hispanics (83%) employed in this category are concentrated in jobs such as cooks, dishwashers, cleaning service workers, and food counter workers.
>
> Hispanics are underrepresented in the managerial and professional occupations, where only 11.8% of Hispanic workers are employed, compared to 14.0% of Black workers, and 24.0% of White workers. On the other hand, Hispanics are overrepresented in the agriculture industry, where 5.7% of Hispanics are employed, compared to 2.7% of Black workers, and 0.35% of White workers.[2] (pp.4-5)

The occupations which have attracted Blacks and Hispanics are the ones which are being most negatively affected by the changing industrial and business structure of the U.S. and Indiana.

Finally, another special concern for providing visible role models for Minority young people is the observation that, although the percentage of Minority students is expected to increase to 38 percent by the year 2000, the percentage of Minority teachers could fall to half of its 1980 high of 12.5 percent.[3]

1/ *The College Board, Equality and Excellence: The Educational Status of Black Americans. New York: The College Entrance Examination Board, 1985. (See Attachment I.)*

2/ *National Council of LaRaza, Hispanics in the Labor Market: 1980-1985. Washington, D.C.: LaRaza, Dec. 1985. (See Attachment II.)*

3/ *"Trends: Minority Teacher Ranks are Thinner", Journal & Courier, Fri., Feb. 14, 1986, p. C2.*

For Indiana, while the percentage of Blacks in the first grade is expected to increase from 14.2 percent currently to 17.7 percent by the year 2000, the number of blacks studying at Indiana colleges and universitites in 1984-85 to become teachers has declined about two-thirds from its number 10 years ago to 200 now.[4/]

The proportions of ethnic group members in Indiana also vary widely by the occupations in which they are employed. For example, in 1980, 8.7 percent of all Whites were employed in an Executive, Administrative, or Managerial occupation, compared with only 4.8 percent of all Blacks. However, 23.1 percent of all Whites were employed in the Operator, Fabricator and Laborer occupations, whereas 30.5 percent of all Blacks were so employed. It is noteworthy that these latter occupations are the ones most requiring retraining and upgrade training as modernization and increasing high-tech industrialization occurs. See Table 30 for other comparisons.

4/ Paul Wiseman, "Educators Express Concern about Lack of Black Teachers." Journal & Courier (Associated Press Release), Sat., March 22, 1986.

TABLE 30

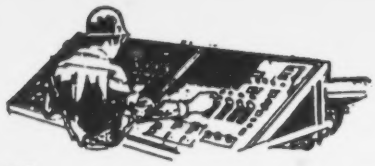
OCCUPATIONS OF EMPLOYED PERSONS IN INDIANA BY ETHNIC GROUP: 1980
(PERCENTAGE DISTRIBUTION OF PERSONS 16 YRS. AND OVER)

Occupation of Employed Person	White	Black	Hispanic 1/	Native American	Asian & Pac. Islander
(100%) Number	2,194,431	147,506	11,102	3,652	9,572
	(100%)	(100%)	(100%)	(100%)	(100%)
Percent Distribution					
Executive Admin. & Managerial.....	8.7%	4.8%	2.8%	5.9%	7.4%
Engineers & Scientists.....	1.8	.7	.6	2.4	8.5
Health Diagnosing.....	.5	.1	.2	.1	7.4
Health Assessment & Treatment.....	1.6	1.3	.6	1.1	2.8
Teachers, Librar. & Counselors.....	4.5	4.2	2.5	2.4	9.0
Health Technicians.....	.8	1.3	1.0	1.5	1.9
Other Technicians.....	1.7	1.0	1.0	.9	7.5
Sales Supervisors & Proprietors.....	1.4	.6	.1	1.5	.8
Sales Reps. & Finance.....	2.8	.8	.3	1.9	1.0
Other Sales & Cashiers.....	5.4	3.5	3.5	3.4	3.5
Admin. Support Includ. Clerical.....	15.8	17.8	14.4	11.1	9.5
H'shld, Protection, & Other Services.....	12.3	22.5▲	14.4	18.6	16.3
Farm Operators & Managers.....	1.9	.0	.2	.5	.2
Farm Workers & Related.....	1.0	.3	.5	.7	.9
Precis., Crafts & Repair Occupations...	14.3	8.6	12.8	15.9	5.8
Equip. Operators & Laborers.....	23.1	30.5▲	43.6▲	30.1▲	15.0
Handlers, Cleaners, & Helpers.....	4.8	7.4	14.4	6.9	2.7

1/ *Estimated as Total-Whites-Blacks-Native Americans-Asian/Pac.Islanders-Non-Spanish "Not Elsewhere Classified", i.e., Spanish people who do not identify themselves as any of the aforementioned races.*

SOURCE: *1980 U.S. Census Reports.*

It can readily be seen that the generally higher-paid occupations, which require more education, have higher proportions of Whites and Asian Americans than Blacks, Hispanics, or Native Americans.



C. Industry Employment Comparisons

(1) The Changing Industrial Labor Force

Through the remainder of this century, robotics is expected to exert an increasing effect upon the industrial workplace in the U.S., according to a recent panel study report by the University of Michigan and the Society of Manufacturing Engineers.[1/]

Throughout industry, the overall displacement rate of workers by robots is forecast to reach 4.3% by 1995. In some industries as many as 20% of the current work force may be displaced by robots, but within this group of affected workers, just 5-6% will actually be disemployed.

Nearly 90% of displaced workers will remain with their current employers through lateral transfer, retraining, or promotion. Among the remainder, half will take early retirement and half will be terminated. [However,]...

According to forecast estimates, 10% of those disemployed by technological change will find new jobs in 2 months or less, 37% within 6 months, and 73% within a year. Some 7% (or about 1,000 people per year through 1990) will be unable to find alternative employment due to lack of marketable skills.

Occupations most affected by robot installations are expected to include production painters (20% displacement), welders and flamecutters (20%), machinists and machinery operators (13%), and assembly workers (10%). Line supervisory personnel are projected to decline by 3%. [(p.10)]

The U.S. manufacture of robots is expected to create a total of more than 44,500 jobs by 1995. [(p.9)]

Increasing automation of production is forecast to create a need for a more highly trained labor force; entry level jobs "with no training or experience necessary" will become increasingly rare. ...The relatively standardized, routine occupations requiring little formal training or skills are exactly the jobs that will find the most robots filling them. Workers previously performing these tasks will be left with two basic options: either to take even more mindless (and lower-paying) jobs that are not economically feasible to automate, or to move up to higher-skill positions. Thus, as has been true in every technological revolution, the need for more education for workers is paramount...[(p.10)] (Underline added.)

Where will these better-trained workers come from? There are currently three main sources: young men and women newly entering the labor force, present workers already possessing the requisite skills, and retrained workers. In 1985, nearly three of every five persons handling robots will be a retrained worker...; only one-quarter of these will be graduates of a robotics program; the remaining 17% will come from other sources. Over time, however, the role of retrained workers will diminish, as present workers approach retirement and more institutions establish robotics curricula. By 1995, only one-third of robotics personnel will be retrained workers, while half will be graduates of institutional programs.[1/] (pp. 77,79-80)

A shorter life cycle for job skills is occurring due to rapid advance and application of technology. This requires the

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1/ *Donald N. Smith & Peter Heytler, Jr. Industrial Robots: Forcast and Trends (Second Edition Delphi Study). Dearborn, MI: Society of Manufacturing Engineers, 1985.*

need for new workers to be educated for a wider span of changing options, and necessitates current workers to be retrained or upgraded throughout their working careers.

These changes are having and will continue to have a major impact upon the status of the Black and Hispanic workforces in particular. This is the case because of Blacks' and Hispanics'(1) over-representation in those occupations being most negatively affected by automation and robotics, (2) lower education and acquired-skill levels, and (3) financial inability to obtain the necessary education or skills training to get and stay in step with the changing technological workplace.

Accordingly, it is critical for workers to have a fundamentally sound educational base, upon which necessary training or retraining can build. Time and cost to keep a workforce current will be of ever growing importance to employers.

According to a recent report from the Office of Technology Assessment, Blacks and "displaced homemakers" (i.e., homemakers forced into the labor force because of divorce, widowhood, disability or long-term spousal unemployment) have been most adversely affected by the decline and technological changes in domestic manufacturing.[2,3/] Manufacturing now accounts for only 20 percent of U.S. jobs, but almost half of the layoffs between 1979 and 1984 have occurred there, particularly among skilled and semi-skilled blue-collar workers. During this period, 11.5 million "displaced" workers lost their jobs because of automation, plant shutdowns and rising imports. Only 60 percent found new jobs during this period -- and only 42 percent of Blacks who have held their previous jobs for at least three years.

The disappearing, well-paid factory-floor jobs of the past are being supplanted by automation, and their labor force share is being transferred to lower-paying service jobs. Between 1970 and 1984, 94 percent of the 23.3 million new nonagricultural workers were in service-producing sectors and only 1 percent in manufacturing. Even since the beginning of the current business expansion in December 1982, almost all the 10 million new jobs[3/] have been in the service-producing sector.

> "For displaced workers who are often unable to move into the more desirable jobs in service sectors without substantial education or retraining, moving to the service sector will mean loss of income and status," the study said. (pp. I,II)

However, American industries will continue to need a highly-skilled work force. This will require job training programs "'to reach many more displaced workers, and emphasize training, particularly skills training, more strongly'"[3/] (p.1) It now appears that jobs being created provide income and benefits which are now more related to the extent and relevance of workers' acquired education than was the case in the past.

2/ *Matt Yancey, "Training Programs May Not Help Workers Adapt, Study Says." Associated Press Release, Feb. 6, 1986.*

3/ *Kenneth B. Noble, "Study Finds 60% of 11 Million Who Lost Jobs Got New Ones." The New York Times, Fri., Feb. 7, 1986, pp.1,11.*

(2) Industry Employment Comparisons: Indiana

Because of Indiana's past concentration of nonagricultural labor in heavy industries, the changing industrial employment composition is especially critical as Indiana proceeds through reorientation. Ethnic-group workers differ not only in terms of occupations but also in terms of industry of employment. For example in 1980, while 3.1 percent of all Whites worked in Agricultural industries, only .7 percent of Hispanics and .1 percent Blacks worked there. Conversely, Blacks were more highly represented than Whites in manufacturing (especially durable goods), services and public administration. Hispanics were more highly represented than Whites and Blacks in manufacturing but less in services.

TABLE 31

INDUSTRY OF EMPLOYED PERSONS BY ETHNIC GROUP FOR INDIANA, 1980
(PERCENTAGE DISTRIBUTION OF PERSONS 16 YEARS AND OVER)

Industry of Employed Person	White	Black	Hispanic[1/]	Native American	Asian & Pac. Islander
Number 100%	2,194,431 (100%)	147,506 (100%)	11,102 (100%)	3,652 (100%)	9,572 (100%)
Percent Distribution					
Agriculture	3.1%	.1%	.7%	1.1%	.8%
Mining	.5	.2	.0	.8	.2
Construction	5.2	2.6	3.7	6.3	1.0
Manufacturing	30.6	34.2	49.0	32.3	26.9
Transportation	3.9	4.4	3.6	5.3	.8
Communications	1.2	1.5	.8	1.5	.8
Utilities	1.4	1.4	.9	1.8	.5
Wholesale Trade	4.1	2.0	2.0	3.7	1.8
Retail Trade	16.7	10.9	11.8	16.0	17.2
Finance, Insur., Real Estate	5.1	4.3	2.8	3.3	3.3
Services (Total)	24.7	31.8	15.7	24.2	43.9
Hospital	3.8	8.4	3.9	4.6	9.0
Educational	8.5	8.9	5.1	5.4	18.5
Soc. & Religious	2.0	3.2	1.7	2.8	2.1
Public Admin	3.3	6.7	3.9	3.7	2.8

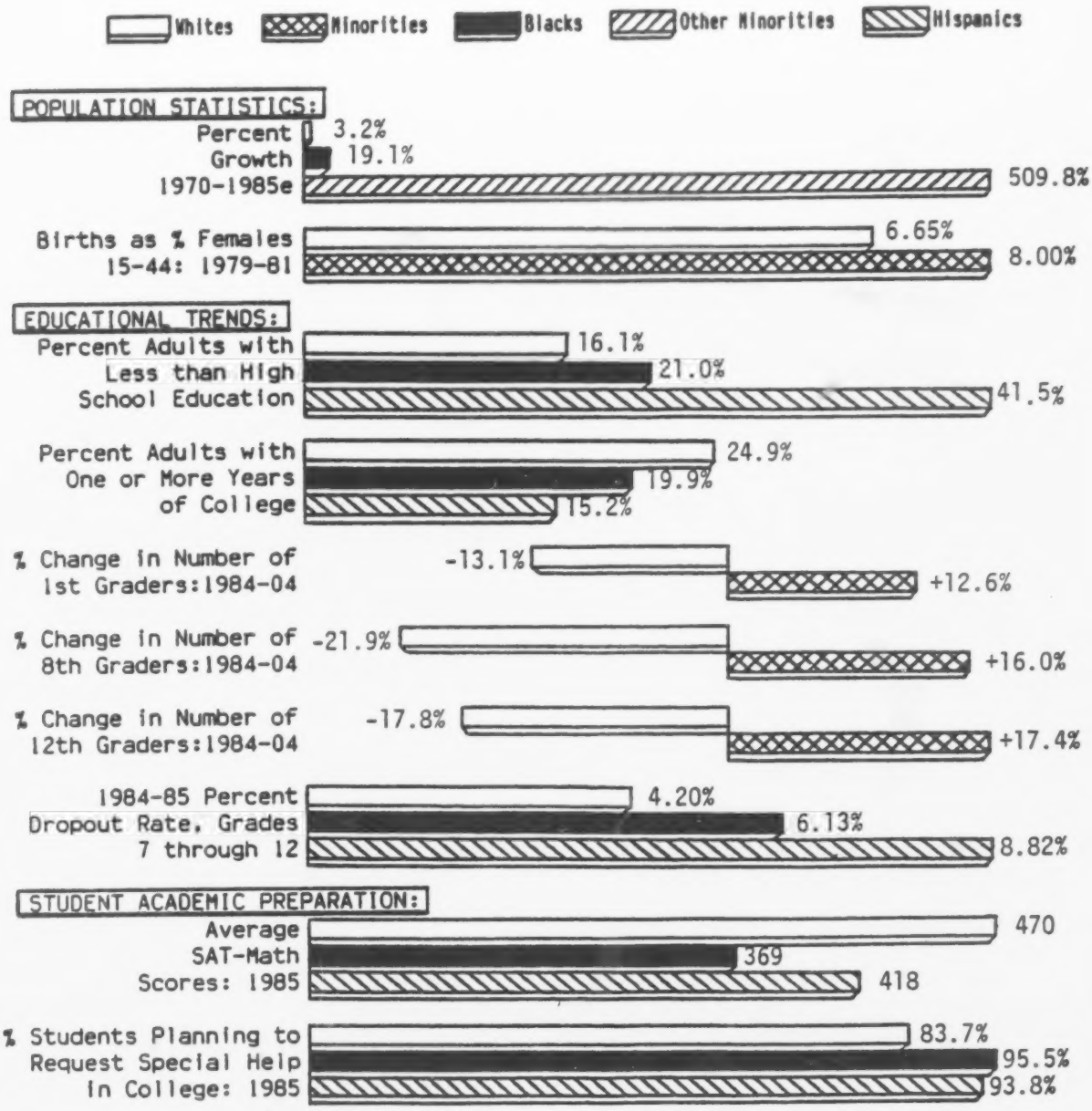
[1/] *Estimated as Total-Whites-Blacks-Native Americans-Asian/Pac.Islanders-Non-Spanish "Not Elsewhere Classified" i.e., Spanish people who do not identify themselves as any of the aforementioned races.*

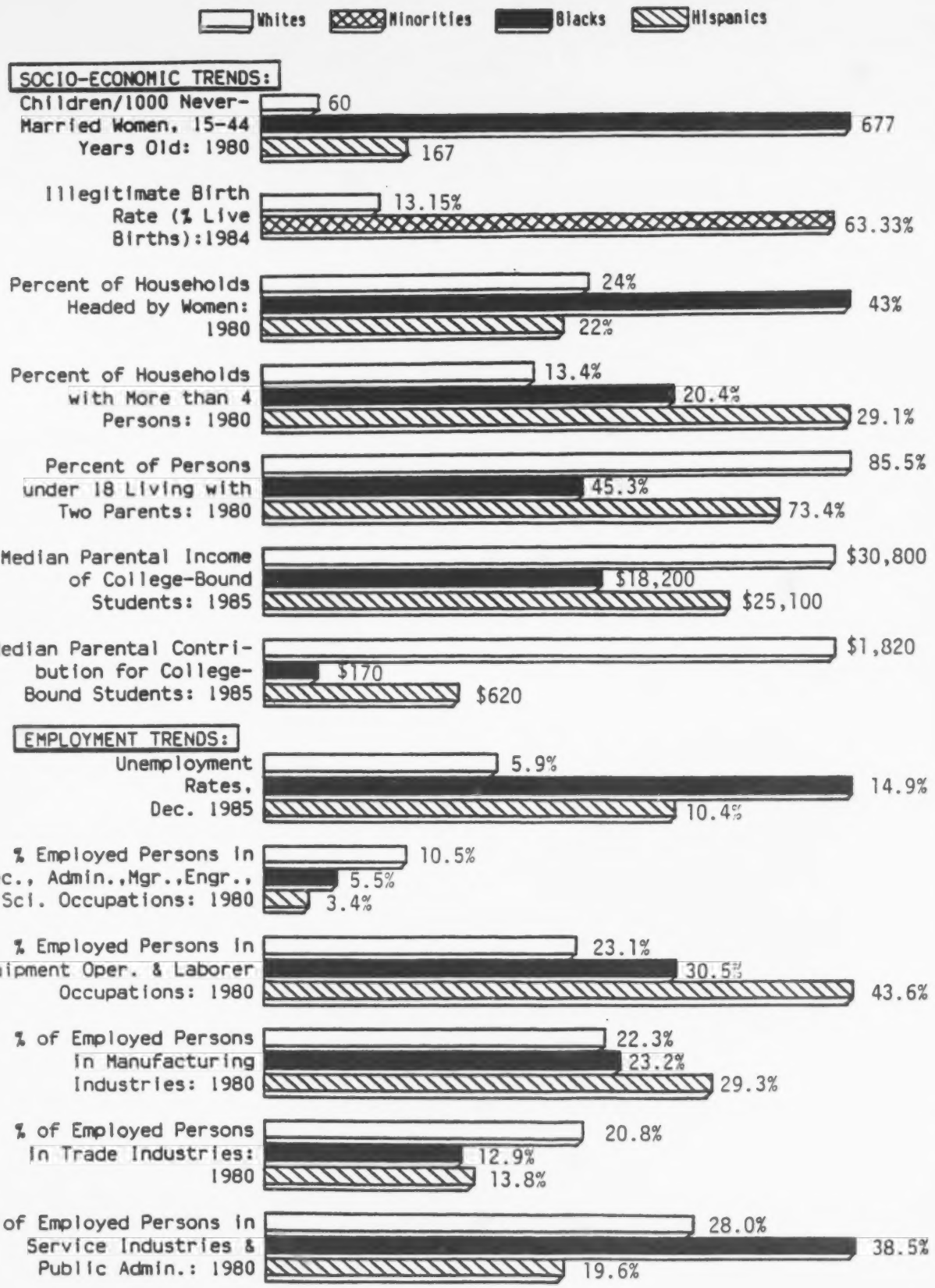
SOURCE: 1980 U.S. Census Reports.

The situation is especially critical for the more populated Indiana counties, not only because of their previous dependence upon heavy industry employment, but also because of their large concentration of less-educated Minority workers.

6. SUMMARY COMPARISONS OF INDIANA'S MAJOR ETHNIC GROUPS

Indiana's major ethnic groups, most notably Whites, Blacks and Hispanics, differ markedly in terms of population statistics, educational trends, academic preparation, socio-economic characteristics, and employment trends. These differences have had and will continue to have major implications for Indiana's societal and economic structure and health. The following bar charts graphically summarize the differences which have been presented in tabular form and discussed in this report.




Whites
Minorities
Blacks
Hispanics
SOCIO-ECONOMIC TRENDS:
Children/1000 Never-Married Women, 15-44 Years Old: 1980
60
677
167
Illegitimate Birth Rate (% Live Births):1984
13.15%
63.33%
Percent of Households Headed by Women: 1980
24%
43%
22%
Percent of Households with More than 4 Persons: 1980
13.4%
20.4%
29.1%
Percent of Persons under 18 Living with Two Parents: 1980
85.5%
45.3%
73.4%
Median Parental Income of College-Bound Students: 1985
$30,800
$18,200
$25,100
Median Parental Contribution for College-Bound Students: 1985
$1,820
$170
$620
EMPLOYMENT TRENDS:
Unemployment Rates, Dec. 1985
5.9%
14.9%
10.4%
% Employed Persons in Exec., Admin.,Mgr.,Engr., & Sci. Occupations: 1980
10.5%
5.5%
3.4%
% Employed Persons in Equipment Oper. & Laborer Occupations: 1980
23.1%
30.5%
43.6%
% of Employed Persons in Manufacturing Industries: 1980
22.3%
23.2%
29.3%
% of Employed Persons in Trade Industries: 1980
20.8%
12.9%
13.8%
% of Employed Persons in Service Industries & Public Admin.: 1980
28.0%
38.5%
19.6%

THE BOTTOM LINE:

The rapid increase in minorities in our population is here to stay. We need to make a major commitment to see that all citizens, young and old have the opportunity to develop to and perform at the highest levels possible. There will be barriers of color, language, and culture, as the proportions and numbers of American Blacks, Hispanics, and Asian Americans grow, and they are joined by others from foreign lands. We must not lower the standards but must increase the effort. To do so will be to the direct benefit of all Americans, as they add the high level of energy and creativity that has always been characteristic of groups who are making their way in America. Their numbers are already so large that if they do not succeed, all of us will have diminished futures. That is the reality that requires a new commitment.

ATTACHMENT I

EQUALITY AND EXCELLENCE: THE EDUCATIONAL STATUS OF BLACK AMERICANS*

SUMMARY

Since the recent wave of reports on educational "excellence" has engulfed the country, numerous reform proposals have been proferred and, in some cases, initiated in states and school districts nationwide. These include changes in curriculum requirements, "standards," and policies for selecting and compensating teachers. However, the reports and the ensuing initiatives have largely ignored issues of educational equality, and analyses of the needs of various pupil populations or the effects on them of new policies have been notable largely by their absence.

This paper attempts to fill part of this void by presenting a brief assessment of the current educational status of black Americans and a discussion of recent policy trends as they affect black students. Among the many trends that emerge from this analysis, the following are most striking:

Demographic Trends

- The structure of black families has changed significantly over the past decade. Female-headed households increased from 28 percent to 41 percent of all black families between 1970 and 1982. This is partly the result of dramatically increased divorce rates and partly due to increases in the numbers of never-married mothers.

- Most black children do not live in two-parent households. In 1982, 49 percent lived with one parent, and 8 percent lived with neither parent.

- In 1982, nearly half (47.6 percent) of all black children aged 18 and under lived in households below the poverty line. This compares to only 17 percent of white children.

Income and Employment

- The proportion of blacks living in households below the poverty line remained constant at 34 percent between 1970 and 1981, but increased in absolute numbers from 8 million to 9 million persons.

- Real median income for black families decreased by 8.3 percent from 1971 to 1981, and the ratio of black to white median family income declined steadily after 1975 to 55 percent, the level it had been in 1960. Although black married couple families registered income gains, they constituted a smaller proportion of black households in 1981 than in 1971.

- Unemployment rates for black men and women in virtually all age categories have increased fairly steadily since 1965. In 1982-83, about 1 out of every 5 blacks in the labor market were unemployed, with much higher rates for teenagers and young adults.

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- Unemployment rates and labor force participation rates are strongly correlated with educational attainment for both blacks and whites. However for blacks, marked differences in employability occur only for those with a college degree.

- Although blacks have made strides since 1970 in gaining access to higher-paying and higher-status jobs, whites were still more than twice as likely as blacks to hold jobs in professional or managerial occupations in 1980. Black participation in these occupations was also concentrated in jobs at the lower end of the professional pay scale.

- In terms of labor force participation and occupational upward mobility, greater strides were made by black women than black men. The same is true for higher education degree attainment, where the number and proportion of degrees has declined for black men but increased substantially for black women.

Educational Attainment

- Although high school graduation rates have improved dramatically for black students over the past two decades, college attendance and completion rates have declined for blacks since 1975.

- Blacks are seriously underrepresented among graduate and professional school students, and black participation rates in postgraduate education have declined since the early 1970s.

- Blacks lose ground relative to non-blacks at each stage of the educational pipeline. In 1972, for example, blacks represented 12.7 percent of all 18 year olds, 10.5 percent of all 1972 high school graduates, 8.7 percent of all college freshmen, and four years later, 6.5 percent of all B.A. recipients. By 1979, blacks represented only about 4 percent of all professional and doctoral degree recipients.

Higher Education

- At the undergraduate level, 42 percent of black college students were enrolled in 2-year colleges in 1980. Persistence rates for 2-year college students are much lower than they are for students attending 4-year colleges, particularly for black students.

- Financial aid has a great affect on college retention rates, particularly for black students, who are nearly twice as likely to stay in 4-year colleges with aid than without. The importance of financial aid for black students is apparent, considering that in 1981, 48 percent of black college-bound seniors came from families with incomes under $12,000, as compared to only 10 percent of their white counterparts.

- On the brighter side, over the past decade, blacks have become more similar to whites (and women more similar to men) in the fields of study in which they received higher education degrees. Increasing proportions of blacks and women are represented in disciplines like business and management and in math- and science-related fields. However, black degrees are still concentrated in education, humanities, and the social sciences where salaries are lowest and unemployment rates highest.

- Although predominantly black colleges enrolled only 27 percent of black college students in 1980 (as compared to more than 50 percent prior to 1970) and accounted for only 34 percent of all black undergraduate degrees in 1980-81, they granted more than 40 percent of all black degrees in agriculture, computer sciences, biology, math, physical sciences, and social sciences.

- In our increasingly technological society, choice of fields is an important dimension of equality. With respect to math- and science-related degrees, blacks lose "field" ground just as they lose attainment ground at several points in the educational pipeline. At the B.A. level, the percent choosing quantitative fields is 60 percent of the national average; at the M.A. level, 40 percent; and at the Ph.D. level, 33 percent. These choices are affected by two factors: parental education and early educational preparation and achievement.

Elementary and Secondary Education

- The educational performance of black students in elementary and secondary schools, as measured by standardized achievement test scores, rose in many areas over the decade of the 1970s, but it remained lower than that of non-blacks by 1980.

- The strongest gains in mathematics and reading test scores were registered by young black students, particularly those from urban, disadvantaged communities and from the southeastern states.

- However, gains in mathematics and science were far less substantial than for reading, and black 17-year olds showed stable or declining scores on achievement measures in reading, mathematics, and science.

- Black students of all ages performed better in the area of mathematical knowledge (factual recall) than in the area of mathematical skills (performing computations and manipulations), and least well in the area of mathematical applications (the ability to solve problems and use mathematical reasoning).

- Disappointing trends in performance for older students, both black and white, and on higher order cognitive tasks in reading, writing, mathematics, and science reflect disturbing changes in educational methods over the last decade. Between 1972 and 1980, use of teaching methods that might encourage the development of higher order thinking abilities--project or laboratory work, writing tasks, and student-centered discussion--declined in public high schools.

Curriculum Equality

A number of indicators suggest that black students, on average, receive educational programs and offerings that differ in kind and content from those of white students. These differences in the substance of education have grave implications for educational achievement and later education and career options. For example:

- Blacks are disproportionately more likely to be enrolled in special education programs for the gifted and talented than are whites. However, these proportions vary widely across school districts, suggesting that administrative policies and practices affect placement as much as do student characteristics.

- At the high school level, blacks are underrepresented in academic programs and are overrepresented in vocational education programs where they receive less educational preparation in areas like English, mathematics, and science, and they lose ground in terms of educational achievement.

- Furthermore, black students in vocational education programs are enrolled earlier and more extensively in programs training specially for low-status occupations than are white students. Typically, these assignments are made by school personnel rather than by election of students or their parents.

- Among college-bound seniors in 1981, most blacks had taken fewer years of coursework in mathematics, physical sciences, and social studies than their white counterparts. Even where years of coursework are similar, the content of courses varies for black and white students. For example, black seniors in 1980 were as likely as whites to have taken at least three years of math, but they were much less likely to have taken algebra, geometry, trigonometry, or calculus. Thus, their years of coursework must have been concentrated in areas like general math or business math.

- Students in low-income and predominantly minority schools have less access to microcomputers and to teachers trained in the uses of computers. Furthermore, students in predominantly minority schools or classrooms are much more likely to use computers for drill-and-practice rather than programming or concept development than students in other schools.

Overall, the evidence suggests that black students are exposed to less challenging educational program offerings which are less likely to enhance the development of higher order cognitive skills and abilities than are white students.

POLICY TRENDS

Several recent policy trends have particularly important implications for black students' schooling experiences. This paper examines trends in three areas: funding for education; graduation and other requirements for students; and teaching force changes.

Financing Education

Since 1975, state, local, and federal funding for public elementary and secondary education has been made more tenuous by several factors: (1) the property tax revolt of the late 1970s, which impaired the ability of many states and school districts to raise revenues; (2) economic recession; and (3) federal aid cuts under the Reagan Administration. Although some states and school districts are beginning to regain a firmer footing, a full recovery in the education sector is by no means complete.

In particular, the reductions in federal aid for compensatory education at the elementary and secondary levels, and in student financial assistance for higher education, have negatively affected educational opportunities for black students. Meanwhile, apparently growing support for the "privatization" of education (through tuition tax credits or vouchers) may disproportionately benefit already advantaged students while leaving public education support still tenuous.

Student Requirements

Standards for students have changed through the institution of minimum competency testing by many states and localities, and are changing further with newly increased course requirements for graduation in many places. While it is difficult to oppose "standards," the effects of these policies must be carefully considered.

Minimum competency tests may improve educational quality by increasing attention to the so-called "basics" of education. There is some evidence, however, that the skills represented on minimum competency tests are not "enabling" skills that lead to higher order thinking abilities, and that instructional programs built around competency tests emphasize rote learning at the expense of higher order cognitive skills; use test-oriented activities like lectures and multiple-choice worksheets and test rather than performance-oriented activities like discussions, writing, and projects involving problem-solving; and de-emphasize nontested subjects like science, social studies, and the arts. Furthermore, students who are denied promotion as a result of these programs make less progress in educational achievement than similar students who are not retained in grade.

The potential benefits and detriments of minimum competency tests and similar approaches to educational improvement must be carefully weighed in the context of what they actually measure and what types of teaching they in fact encourage.

Increased requirements for graduation--the so-called "new basics"-- also hold promise for improving the content of eductional programs and for reducing existing differences in students' schooling experiences. However, uniform educational requirements, if administered without flexibility and sensitivity, may exacerbate dropout rates, raising standards for some while excluding others from school altogether. Equally important is the fact that there is not now a sufficient number of qualified teachers to teach the new basics (particularly advanced math and science courses), and teacher supply looks still more grim for the foreseeable future. Inequalities in available teacher resources will also affect the quality of minority students' educational programs, whether or not they are conducted under the rubric of the new basics.

Teaching Force Trends

Emerging teacher shortages have led to projections that by 1990 only 70 to 80 percent of the demand for new teachers will be satisfied. Furthermore, new entrants to the profession are less academically able than was the case in the past when education benefited from a captive labor force of academically talented women and minorities who were barred from other professional occupations. Now these students are choosing other more lucrative professions. Low salaries and low occupational prestige are major reasons for the inability of teaching to recruit new entrants. Unprofessional working conditions further contribute to high current levels of teacher dissatisfaction and attrition.

The result for students where qualified teachers are not available is that courses are taught by teachers inadequately prepared in the subject area, class sizes are increased, course content is "watered down," or the courses are simply not offered.

Two popular policy responses to the problem of attracting and retaining qualified teachers are teacher competency testing of preservice teacher candidates and merit pay for inservice teachers. By 1983, 30 states had mandated competency tests for teacher certification and 12 additional states were considering such a move. Despite the fact that research has found no consistent relationship between scores on such tests and later teaching performance, the tests are viewed as a means for preventing incompetent teachers from entering the profession. The tests are disproportionately eliminating minority candidates from teaching; failure rates for blacks and other minorities are 2 to 10 times higher than those of white applicants in the states using the tests.

Whether these outcomes are the result of inferior educational opportunities available to minority teaching candidates or to cultural bias in the tests themselves, the differential pass rates are a source of social concern. Critics argue that if the tests do not predict actual ability to teach, they are exacerbating teacher shortages and eliminating minority teachers from the profession at great expense to minority children and to the society at large, without commensurate gain in educational quality. Even if the tests do in some way sort out less qualified teacher candidates, they do not address the overall problem of improving the attractiveness of teaching to increase the pool of academically talented recruits.

Merit pay for inservice teachers also fails to address the roots of the teaching force problem. Even if the failures of past merit pay plans are overcome, they will do little to enhance recruitment or retention unless major changes in teachers' salaries and working conditions are made. Minority children are most at risk from the effects of these teaching force trends, for they attend school in those areas of the country and school districts where salaries and working conditions for teachers are least conductive to the attraction and retention of high quality teachers.

CONCLUSIONS

Black students have made great strides since 1960 in pursuing and profiting from enhanced educational opportunities. Levels of educational attainment have improved, and disparities in fields of study and later career options have begun to narrow. Some erosion in these gains has occurred since 1975, however, and current policy trends threaten to reverse the movement toward equality.

"Excellence" for black students will not become a reality unless and until they receive enriched curricular opportunities in elementary and secondary schools, sufficient financial assistance to pursue higher education opportunities, and instruction from well-qualified teachers. Attainment of these goals means that the excellence agenda for black students cannot ignore the adequate and equal financing of public education, the appropriateness of courses and achievement measures which are intended to enforce higher standards, or the policies which will ultimately determine who will teach in our schools.

Of paramount importance is the content and substance of education received by black students. Although finances and broad program supports cannot be ignored, in the final analysis it is the interaction that goes on between students and teachers in individual schools and classrooms that defines educational quality and equality. Subtle and not-so-subtle differences in curriculum track, in course content, and in teaching methods, in the qualifications and commitment of school personnel, in the opportunities for innovation and enrichment at the school site, ultimately determine which students will

receive a true education and which will merely be trained to assume a permanent role in the nation's underclasses.

These are not issues which are currently at the forefront of the nation's attention. Educators and policymakers who are concerned about equality, as well as fundamental excellence, must put them there.

ATTACHMENT II

NATIONAL COUNCIL OF LA RAZA
OFFICE OF RESEARCH ADVOCACY AND LEGISLATION

Perspectivas Públicas
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Title: HISPANICS IN THE LABOR MARKET: 1980-1985

Contact: Marta M. Escutia, (202) 628-9600

HISPANICS IN THE LABOR MARKET: 1980-1985
(Selected Excerpts)

I. INTRODUCTION

Hispanic Americans are the nation's youngest and fastest-growing major population group. Their youth and relatively low levels of education pose especially intractable problems, suggesting that hard-core Hispanic unemployment and poverty will endure into the future.

The 1980 Census estimated the Hispanic population in the United States at 14.6 million, or 6.4% of the total U.S. population. The Hispanic community had a birth rate in 1980 of 106.5 births per 1,000 women aged 18-44, compared to the White rate of 68.5 and the Black rate of 84.0. This high fertility rate, which is well above "replacement" level, guarantees larger cohorts of children for years to come. These high birth rates, which stem partly from a higher proportion of Hispanic women of child-bearing age, reflect the low median age of Hispanics, which is 23.2 years as compared to 31.7 years for Whites, and 24.9 years for Blacks.

Hispanics are projected to account for at least 8% of the labor force by 1995. The Hispanic community is an increasing pool of potentially productive workers. However, the progress of Hispanics in the labor market is hindered by their low levels of education, employment, and earnings. Hispanics are the least-educated and the lowest-paid of all groups in the labor market. Hispanic workers are "distressed" workers -- a phrase coined by Professor Daniel Saks of Vanderbilt University to identify large segments in the labor force who do poorly in the labor market despite good economic times.[1/] As "distressed" workers, Hispanics are extremely vulnerable to shifts in the economy and to restrictive federal policies in education and employment and training.

II. LABOR MARKET STATUS

A. Education

Data from the Bureau of Labor Statistics reveal that Hispanics are the least-educated major population group in the country, and that the general Hispanic population has lower educational attainment than Hispanics in the civilian labor force: ... Hispanics appear to be more undereducated when compared to Blacks and Whites, as shown in the following data from the March 1981 Current Population Survey:

MEDIAN SCHOOL YEARS COMPLETED, 1981
(Persons 25 years old and over)

White Males	12.6 years	Hispanic Males	11.0 years
White Females	12.5 years	Hispanic Females	10.5 years
Black Males	12.1 years		
Black Females	12.1 years		

... A disproportionately high percentage of Hispanic youth leave high school without a diploma. Data from a 1979 Census Bureau study showed that 35% of Hispanics 18-21 years old had dropped out of high school as compared with 25% of Blacks and 15% of Whites. In 1983, only 50.3% of Hispanic 18-19 year olds had graduated from high school as compared to 75.6% of Whites and 59.1% of Blacks...

Education is the single most important human capital characteristic in terms of its direct correlation on future earnings. A study using data from the 1976 Survey of Income and Education and the 1970 census found that Hispanics have lower returns to education than Whites. For example, White men earned 6.1% more for each additional grade of school completed, whereas Mexican men earned 5.4% higher wages per school grade completed, Puerto Rican men earned 3.6%, Cuban men earned 3.5%, and Black men earned 4.9%.[2] ...

B. Labor Force Participation

... Hispanic men have higher labor force participation rates than White or Black men. Some economists believe that the higher overall labor force participation rate reflects the fact that the current Hispanic male population in the United States is, on average, younger than the non-Hispanic male population (in 1983, 49.7% of the adult Hispanic men were between the ages of 20 and 34 as compared to 39.1% for all adult men) and young adult men traditionally have higher labor force participation rates than old[er] men.[4] Hispanic women, like all women, have lower labor force participation rate[s] than men... Hispanic women still have somewhat lower labor force particip[ation] rates than other women.

C. Occupational Distribution

In 1984, Hispanic workers were especially concentrated in the following occupations:

1. Technical, sales, and administrative support, where 25.8% of Hispanics in the civilian labor force are employed, compared to 30.9% of the total labor force. Over half of Hispanics (60%) employed in this category are concentrated in administrative support, including clerical work.

2. Operators, fabricators, and laborers, where 25.0% of Hispanics in the labor force are employed, compared to 16.0% of the total labor force. Over half of Hispanics (55%) employed in this category are machine operators, assemblers, and inspectors; one-fourth (27%) are handlers, equipment cleaners, and helpers.

3. Service occupations, where 17.6% of Hispanics in the labor force are employed, compared to 13.5% of the total labor force. Excluding private household and protective service occupations, over four-fifths of Hispanics (83%) employed in this category are concentrated in jobs such as cooks, dishwashers, cleaning service workers, and food counter workers....

Hispanics are underrepresented in the managerial and professional occupations, where only 11.8% of Hispanic workers are employed, compared to 14.0% of Black workers, and 24.0% of White workers. On the other hand, Hispanics are over-represented in the agriculture industry, where 5.7% of Hispanics are employed, compared to 2.7% of Black workers, and 0.35% of White workers.

D. Earnings

The occupational concentration of Hispanics is within those jobs which require a low level of skills and are low paid....

Hispanic men and women earn the lowest wages in the labor market....

Professor Cordelia Reimers in her study, "A Comparative Analysis of the Wages of Hispanics, Blacks, and non-Hispanic Whites," found that the average wages offered to minority men are at least 15% below those offered to White men.[5] The Reimers study, based on data from the 1976 Survey of Income and Education and the 1970 Census, yielded the following findings:

1. The lower level of education of Hispanics was the single most important reason for the lower wages they received compared to non-Hispanic Whites.

2. Controlling for sex, age, race, education, and other observable characteristics, lower wages among Hispanic groups were attributed, in part, to employment discrimination. Puerto Rican and Central and South American men were found to experience the most employment discrimination...

Education was found to be the major source of differences in wage offerings.[6] ...

The Reimers study also found that differences in language fluency, time in the United States, work experience, race, age, armed forces experience, health and government employment are also sources of wage differentials. But, after all these factors are taken into consideration, a wage gap still remains, which can be attributed to discrimination.[7] ...

E. Unemployment

Hispanics face severe, continuing unemployment and underemployment. During both good and bad economic times, unemployment among Hispanics is usually 60% higher than that of White Americans....

III. CONCLUSIONS AND POLICY RECOMMENDATIONS

An analysis of the labor market data clearly shows that Hispanic workers occupy the bottom rungs of the labor market. Although they have a higher labor force participation and lower unemployment rate than Blacks, Hispanics are the least-educated and earn the lowest wages of any major population group in the country. However, Hispanics are a youthful subpopulation group with a vast productivity potential. Hispanics are projected to account for at least 8% of the labor force by 1995. Though national demographics will favor lower unemployment over the next 12 years as prime-age workers make up a larger share of the work force, the particular demographic trends of the Hispanic community indicate the opposite, since its high birth rates and lower median age mean that Hispanics will be entering the workforce at a high rate.

One long-range effect of this demographic trend is that the taxable salaries of Hispanic workers will be increasingly vital to the fiscal viability of many domestic programs, especially Social Security, which relies on withholding allowances of current workers for the support of current retirees. It is not unrealistic to envision an aged White population being supported by an increasingly non-White workforce. Therefore, changes in public policy, which recognize these demographic realities, are necessary in order to bring about greater parity in the labor market for minority subpopulation groups such as the Hispanic community....

Hard-core structural unemployment primarily affects disadvantaged minorities and individuals who lack the education necessary to meet the needs of a changing economy...

Hispanic workers are disproportionately vulnerable to shifts in the economy and to restrictive federal policies in education and employment and training. The growing Hispanic population will make up an increasing segment of the future labor force. Therefore, to enable Hispanics and other minority groups to make their full contribution in the future -- and to assure a trained workforce which can meet the future needs of the U.S. economy -- human investment partnerships must develop between the public, private, and nonprofit sectors. The Hispanic community is a human resource, whose reservoirs must be tapped in order to maximize its workforce participation and productivity potential. The investment should be made now in order to reap societal benefits and protect the nation's economic security tomorrow.

ENDNOTES

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4. Roth, Dennis, "Hispanics in the U.S. Labor Force: A Brief Examination," Congressional Research Service, Economics Division, Library of Congress, August 1, 1984.
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ATTACHMENT III

ACCESS TO HIGHER EDUCATION: THE EXPERIENCE OF BLACKS, HISPANICS AND LOW SOCIO-ECONOMIC STATUS WHITES*

(HIGHLIGHTS AND SUMMARY OF REPORT)

HIGHLIGHTS

College Attendance Patterns

The decision to attend college continues to be influenced by a student's socioeconomic circumstances.

- ▷ Slightly more than half of the students who never attended college are in the study's lowest [Social Economic Status] SES quartile.

- ▷ Almost half of low-SES whites among 1980 seniors never attended college.

- ▷ A significant proportion of black 1980 seniors (31 percent) applied to college but were not attending two years later. The overall figure for all 1980 seniors was 23 percent.

- ▷ Overall, 40 percent of 1980 seniors enrolled in college and were still in attendance two years later.
  --- The overwhelming majority of these students (65 percent) were in the highest SES quartile.
  --- The least represented groups for college attendance were Mexican-Americans and low-SES whites; among these groups, 23 percent and 25 percent, respectively, were attending college two years later.
  --- In contrast, 53 percent of Cuban-Americans and 56 percent of high-SES whites were still in attendance two years later.

- ▷ Thirty-seven percent of 1980 seniors who entered college after graduation were not in attendance two years later.
  --- Minorities and low-SES whites were twice as likely to be in this group than high-SES whites.

Two-Year and Four-Year College Attendance

- ▷ Of those 1980 seniors enrolled in college 58 percent attended four-year institutions and 44 percent attended two-year colleges.

- ▷ Students attending four-year colleges had scored somewhat higher on the senior-year achievement tests than their two-year counterparts.

- ▷ The majority of black and high-SES whites attended four-year institutions (60 percent and 65 percent, respectively).
  --- In contrast, 54 percent of low-SES whites and 61 percent of Hispanics attended two-year colleges.

*SOURCE: *Valerie Lee, American Council on Education, Division of Policy Analysis and Research, One Dupont Circle, Washington, D.C. 20036-1193, May 1985.*

- ▷ The distribution of Hispanics enrolled in two-year institutions by nationality are:
  - --- Mexicans-Americans 65 percent
  - --- Cubans 56 percent
  - --- Puerto Ricans 48 percent and
  - --- Other Latins 57 percent

- ▷ The average scholarship amount for students attending four-year institutions was twice the amount of those attending two-year colleges.

- ▷ Twenty-two percent of students at four-year institutions majored in technical fields as did 19 percent at two-year institutions.

Students Who Withdrew From College

- ▷ Overall, men were more likely to withdraw from college than women.
  - --- Fifty-three percent of men withdrew from college compared to 47 percent of women.
  - --- Among low-SES whites women withdrew from college more so than their male counterparts.

- ▷ Women tended to withdraw for financial reasons. Sixty percent of women indicated they withdrew for financial reasons compared to 40 percent of men.

Characteristics of Students by Achievement Levels

- ▷ Seventy-one percent of 1980 seniors of "high ability" were attending college two years later.

- ▷ Students of "high ability" were twice as likely to major in the technical fields than those of "average ability".

- ▷ Women were less likely to be in the "high ability" group than men.

- ▷ Blacks and Hispanics were the least represented 1980 seniors in the "high ability" group.

- ▷ More than three quarters of 1980 seniors in the average ability groups were not attending college two years later.

Sex Differences Among Black Students

- ▷ More than half of black women (59 percent) were enrolled in college two years after high school graduation compared to 41 percent of black men.

- ▷ Black women withdrew from postsecondary education institutions more so than their male counterparts (58 percent vs. 42 percent, respectively).

- ▷ Fifty-six percent of black women "couldn't afford to continue" college compared to 44 percent of men.

ATTACHMENT III (Continued)

SUMMARY

Part I: Profiles of Each Group

Blacks

Blacks reported an average family income of $16,374 and more than half (53 percent) indicated that they were from single parent families. Of all the subgroups, blacks were the most likely to come from this family type. On average their parents had 12.4 years of education. More than half (52 percent) of the blacks in the sample were in the lowest [Social Economic Status] SES quartile and 11 percent were in the highest quartile.

While in high school, blacks took an average of approximately two years of mathematics courses and approximately one year of laboratory science. In addition, black students spent about 4 hours per week on homework and watched television for approximately 4 hours per weekday in their senior year of high school. On a senior-year achievement test composite, 56 percent scored in the lowest quartile.

Black students appear to be college-oriented. As far back as the eigth grade, 49 percent expected to go to college. In comparison, 41 percent of Hispanics and 34 percent of low-SES whites expressed this idea in eighth grade. In high school, 52 percent were in the college preparatory track, much higher than either Hispanics or low-SES whites. A correspondingly lower percentage (25 percent) were in the vocational track.

Two years after high school graduation 37 percent of blacks were in college. Approximately 46 percent of blacks in higher education were attending either doctoral granting or comprehensive universities and 36 percent were in two-year institutions. Fewer blacks were in two-year institutions than either Hispanics (53 percent) or low-SES whites (47 percent).

Hispanics

The average family income reported for Hispanics was $18,882; 35 percent were from single-parent homes. Almost half (48 percent) of Hispanic students are in the lowest social class quartile. Their parents had an average of 12.1 years of education.

While in high school, 37 percent of Hispanics were enrolled in the college preparatory track, 34.1 percent were in the general track. Hispanics were more likely to be in the general track than blacks (34 percent vs. 24 percent, respectively). High school coursework for Hispanics included an average of approximately 2 years of math and one year's work in the lab sciences. These students tended to spend an average of 3.5 hours on homework and spent 3.2 hours per weekday watching television. Slightly more than half (51 percent) of Hispanics scored in the lowest achievement quartile on the senior-year test composite.

In 1982, only 30 percent of the original sample of Hispanic high school seniors were enrolled in postsecondary education. College attendance for Hispanics was lower than for blacks (30 percent vs. 37 percent, respectively). As a matter of fact, 60 percent of Hispanics were working for pay two years after high school. Less than half (49 percent) of those going on for postsecondary education had applied to college directly from high school. Of those Hispanics who attended college over half (53 percent) were enrolled in community colleges and about one-third (31 percent) were enrolled in doctoral or comprehensive universities. As far back as the eighth grade, 41 percent planned to attend college.

Low-SES Whites

Whites in the HS & B sample were divided into two groups -- low-SES whites and high SES-whites -- based on a composite measure of a family's socio-economic status. Low SES-whites were used as a disadvantaged comparison group for the two racial/ethnic groups.

Average family income of low-SES whites ($16,566) was slightly higher than that of the black subsample, and somewhat lower than the Hispanic group. This amount represents nearly 50 percent of the average family income of high-SES whites. Overall, the SES level of this group is only slightly below the two racial and ethnic minority groups, but the average parental education (11.4 years) is about one year below that of blacks and Hispanics of low-SES.

In terms of high school achievement, this group falls almost midway between the two minority groups and the high-SES whites. Course enrollment in high school is quite similar to the minority groups. Vocational enrollments are quite similar to that of Hispanics (both 29 percent), with considerably less college preparatory enrollment than found with blacks (36 percent vs. 52 percent). College expectations in the eigth grade were the lowest of the three disadvantaged groups (34 percent).

Reflecting their low positon on college expectations, and in defiance of their overall achievement level, only 28 percent of this sample was in college two years out of high school. Slightly less than half of these students applied to college directly from high school (49 percent), and we find that 63 percent were working for pay in 1982 - the highest percentage of the four groups. Eighteen percent were married, paralleling the Hispanics (16 percent), but much higher than either the blacks or high-SES whites (both 7 percent).

For those 28 percent of the low-SES whites who were actually in college, fewer are in doctoral and research universities (12 percent) and more in comprehensive universities (23 percent). Almost half (47 percent) are in two-year colleges. Course enrollments in math, science, foreign language, and social science are below the other disadvantaged groups.

High-SES Whites

This group was meant to serve as a comparison for the three disadvantaged groups. The average family income for this group ($30,778) is 60 percent more than the next highest group, the Hispanics. The average parental education is over two years more than the highest of the three other groups (14.8 years). Only 18 percent of these students come from single-parent families, about half that for the average of the other groups and, one-third that for blacks.

High school achievement is almost 20 percent higher than that of the minority groups, 10 percent above low-SES whites. All four groups of students seem to average about 20 hours per week in paid work during high school, but by the time these students are two years out of high school, only 51 percent of this group was working, compared to 63 percent of low-SES whites. These students did more homework in high school (4.5 hours/week), watched less television per weekday (2.7 hours), and took considerably more academic courses in high school, averaging a year more of math and twice as much science.

Sixty-five percent of this group took a college preparatory program in high school, and only 14 percent were in the vocational program, figures that are double those of the low-SES white group for college preparatory enrollment, and half that for vocational enrollment. Twice as many of these students (15 percent) went to private high schools. College expectations expressed in the eighth grade were about double those of the low-SES whites (63 percent vs. 34 percent).

The 60 percent of this sample who are in college reflect a much higher percentage who applied directly from high school (75 percent). Over half of these students (52 percent) are in doctoral-granting or comprehensive universities, only a small proportion more than for blacks, but considerably more than for Hispanics or for low-SES whites. Suprisingly, there is a considerable proportion of these students enrolled in two-year colleges (33 percent). College course enrollment in math, science, and social science is higher than for the other groups.

Part II: Further Comparisons Among Subgroups

Students Who Applied to College from High School, But Did Not Attend

A large proportion of students (about 23 percent) reported that they had applied to college while in high school, but two years later they were not in college.

Socioeconomic factors appear to be one of the reasons for not attending college. Over half of the students who never applied to college are in the lowest SES quartile. In comparison, 65 percent of students currently attending college are in the highest SES quartile. Students who applied but subsequently were not attending fall into a middle position, with 26 percent in the lowest SES quartile and 17 percent in the highest quartile. Put differently, approximately 17 percent of those in the highest achievement quartile applied but did not attend. These two measures -- lower than average SES ranking and below average achievement -- suggest that both financial and academic reasons influence students who have applied to college but do not attend.

What are the characteristics of the students in this group? Blacks are more likely to be in the group (31 percent) as are Hispanics (26 percent). The representation of low-SES whites (24 percent) is not significantly different from the overall mean, and high-SES whites are less likely to be represented (19 percent).

If we look only at those students who stated that they had applied to college while still in high school, a striking 37 percent are not in college two years later. However, for minorities those proportions are even greater: 48 percent of those blacks and 50 percent of those Hispanics are no longer in school. Within the population of whites who applied to college from high school, almost twice as many low-SES as high-SES whites are not in college (48 percent vs. 26 percent, respectively) which would indicate that there are socio-economic reasons for the difference.

Students in Two-Year and Four-Year Colleges

Of students in college two years out of high school, almost half (44 percent) are in two-year colleges. There are moderately strong social class and achievement differences in favor of students in four-year colleges. Blacks are less likely than the general population to be found in two-year colleges, and Hispanics are more likely. There are strong social class differences in the white sample's likelihood of attending each college type.

Total institutional costs, which are estimated by the respondents, average about 50 percent lower in two-year than in four-year colleges for school year 1981-82, with tuition comprising the bulk of those costs.

About 14 percent of those students currently in two-year colleges were offered loans, and about the same proportion were offered scholarships, which averaged about $1,100 and $700, respectively. For those students currently in four-year colleges, the proportions are substantially higher: 25 percent were offered loans and 28 percent were offered scholarships, each averaging about $1,200.

There is a strong contrast in the types of course in which students enroll in the two-year colleges. Students in two-year colleges are less likely to major in technical fields. The most striking differences are found in the areas of physical sciences, biology, and math; no diffrences exist in either computer science or engineering.

Less than half of the students in two-year colleges plan to graduate from college, compared to 72 percent of those in four-year colleges. The differences in educational aspirations for advanced degrees are even more marked. Only 66 percent of two-year college students, comparedto 82 percent of four-year college students feel they have the ability to complete college. However, over 70 perent of them plan to hold white-collar jobs by the age of 30, compared to 83 percent of those in four-year colleges.

In summary, students in two-year colleges are les likely to have been continuously in school since high school and, on average, are lower in both social status and ahievement measures. They are less educationally ambitious, and less sure of both their academic abilities and ther overall self-image. They were less likely to have been offered financial aid. If aid has been offered, it isconsiderably less, although representing about the same

proportion of total costs. Students in two-year colleges have taken considerably fewer college-level academic courses in all areas, and are somewhat less likely to choose technical areas as possible majors. Blacks are somewhat less likely and Hispanics more likely to be in two-year than four-year colleges. There is less difference in occupational than in educational ambitions for the two groups, which indicates a possible mismatch or lack of information for the two-year college sample.

Students Who Have Interrupted Their Schooling Since High School

This analysis examines students who have been in some form of postsecondary education sometime since high school, but have indicated that they have either "withdrawn from any school since high school" (25 percent) or "transferred from one school to another between high school graduation and February, 1982" (18 percent).

Transfer Students

Transferring seems to be positively related to social class. Achievement does not appear to be related to transfer -- in fact, those in the middle ranges are more likely than either extreme of the achievement distribution to have transferred. Within minority groups, both black and Hispanic males are more likely to transfer than their female counterparts.

Students Who Have Withdrawn

Because of ambiguity in the questionnaire, this group probably includes both those students who have left college at the end of their second year out of high school, and those who have transferred to another school. Comparing these students with those in college who have remained in their original schools, we see that the withdrawal group is lower on measures of social class, high school achievement, and self-image. We could infer that students choose to withdraw for both economic and academic reasons. Students who withdrew were less satisfied with almost every aspect of life in the last school in which they had been enrolled.

The biggest satisfaction differences involve personal intellectual growth and the development of work skills. Students are generally less satisfied with the counseling and job placement aspects of their schools, and more satisfied with aspects of teaching. Readers should be cautioned about drawing any conclusions from students' reports about school dissatisfactions, in view of the fact that personal differences, both economic and intellectual, were related to withdrawal as well.

Of those who state they had withdrawn from some school since high school graduation, 32 percent indicate that they withdrew for financial reasons. Of the group who "could not afford to continue," both the low-quartile SES and the low-quartile achievement groups are over-represented. Blacks, Hispanics, and low-SES whites are all more likely than high-SES whites to have withdrawn for financial reasons, and all three of these groups show males more likely than females to withdraw for lack of the financial means to continue.

In summary, students withdraw from postsecondary educational institutions for a number of reasons: economic, intellectual, and dissatisfaction with their schools. Minority status is related to withdrawal, but it is difficult to say whether this is due to social class or racial differences. Although transfer is positively related to social class, withdrawal is negatively related: both relationships are moderate. The differences among college satisfaction ratings for those students who withdrew vs. those who did not are not surprising; what seems most noteworthy is the fact that such a large proportion of college students have withdrawn from <u>some</u> college by the end of their second year out of high school (25 percent) and that withdrawal is more likely for males than for females throughout most minority subsamples, but not among high-achieving and high-SES whites.

Higher Achieving Students

The entire sample was divided in order to compare the characteristics of lower-achieving and higher-achieving students. This higher achieving group encompasses slightly over 30 percent of the sample. Minority groups are largely underrepresented in this sample, much more so than their lower social class mean would explain. Less than

10 percent of both the black and Hispanic subgroups are in the higher ability group; however, 24 percent of the low-SES whites are so designated (and almost half of the high-SES white sample).

Of the higher achievement group, 71 percent are in college two years out of high school, and 75 percent are working for pay. Clearly, these two groups overlap. Of the entire sample in college, 56 percent of the higher achieving group are in four-year colleges and only 28 percent in two-year colleges, constrasting with 44 percent in four-year and 72 percent in two-year colleges for the remainder of the in-college group.

Clearly achievement and enrollment in four-year colleges are highly related. Also, students of high achievement are much more likely to be in doctoral and research universities, and somewhat more likely to be in comprehensive and liberal arts institutions. The high-achieving students are likely to choose majors in technical areas, particularly in the physical sciences, mathematics, and engineering.

The educational aspirations of the higher-achieving students are considerably higher than the remainder of the sample. For the students who indicate their educational aspirations two years out of high school (30 percent of the entire sample did not answer this question), 77 percent of the more achieving group indicate that they plan at least to complete a BA, and 35 percent plan on pursuing advanced degrees. Comparable figures for the average ability students are 36 percent and 12 percent. Over 80 percent of the more achieving students believe they definitely have the ability to complete college, whereas slightly more than half of the remaining sample share that self-assessment of ability.

Clearly, social class and measured achievement are highly related in this sample, with 41 percent of the upper quartile of the SES distribution falling in the higher ability group, and only 10 percent of the lowest SES quartile so designated. Students in the higher achievement group have taken more math and science courses in high school, 80 percent took three or more years of math, and 38 percent took two or more years of physical science.

High school academic track placement is also highly related to subsequent measured achievement, with over 80 percent of these higher ability students having been in the college preparatory program and only 8 percent in the vocational program. Corresponding figures for the remainder of the sample are quite different: 38 percent in the college preparatory program and 28 percent in the vocational program. Perhaps some further analysis of the 8 percent of students from the vocational program who scored in the top 30 percent on high school achievement might be warranted. Track placement, high school course enrollment, and measured ability are very highly related.

Thus, 30 percent of the sample falling in the group designated higher achievement for this report are more likely to be of a somewhat higher social class, white, and are much more likely to have taken more academic courses in high school. Course enrollment is highly related to high school academic track placement, and both are highly related to achievement measured at the end of high school.

ATTACHMENT IV

THE READING REPORT CARD

Progress Toward Excellence in Our Schools

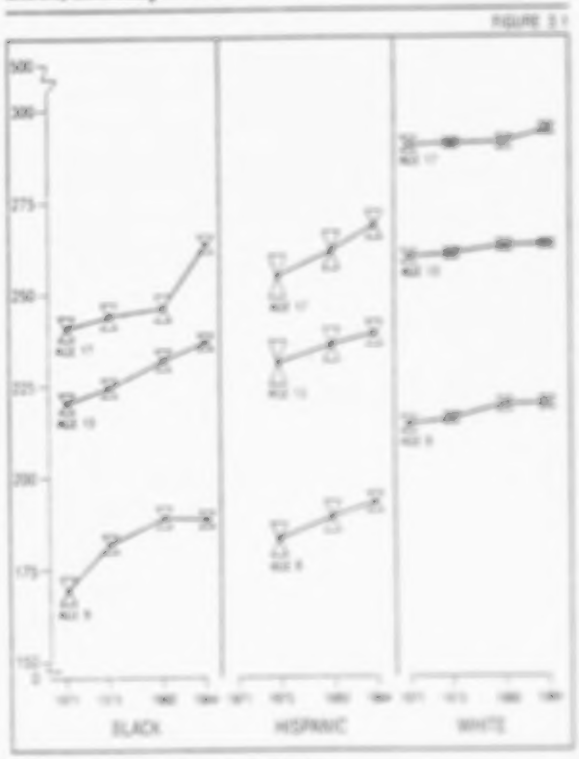
Trends in Reading over Four National Assessments, 1971-1984

Selected excerpts from subject report:*

Needs Further Improvement

- The marked improvements in the achievement of minority and disadvantaged urban students between 1971 and 1984 have reduced the gap between their performance and that of other students. Still, the average reading proficiency of these students is quite low and in need of further improvement. For example, the average reading proficiency of Black and Hispanic 17-year-olds is only slightly higher than that of White 13-year-olds.

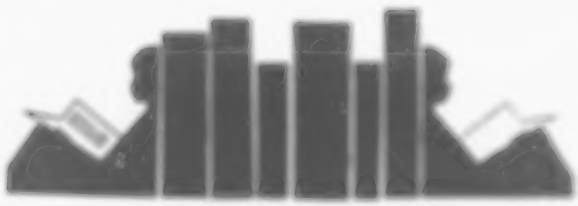
Trends in Average Reading Proficiency for White, Black, and Hispanic Students



- Six percent of 9-year-olds in 1984 could not do rudimentary reading exercises and are in danger of future school failure. Forty percent of 13-year-olds and 16 percent of 17-year-olds attending high school have not acquired intermediate reading skills and strategies, raising the question of how well these students can read the range of academic material they are likely to encounter in school. Few students, only about 5 percent, even at age 17, have advanced reading skills and strategies.

Other Trends

- The influence of home environment is apparent from the relationship between reading proficiency and both available reading material in the home and level of parental education. At all three ages, students from homes with an abundance of reading materials are substantially better readers than those who have few materials available. At all three ages, students whose parents have a post-high school education read substantially better than those whose parents have not graduated from high school.



*SOURCE: Report No. 15-R-01, National Assessment of Educational Progress, Educational Testing Service, Rosedale Road, Princeton, New Jersey 08541.

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